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1987 Farm Costs and Returns Survey Data

Selected State and Region Highlights

1987 FARM COSTS AND RETURNS SURVEY DATA: SELECTED STATE AND REGION HIGHLIGHTS, National Agricultural Statistics Service, Estimates Division, and Economic Research Service, Agriculture and Rural Economy Division, U.S. Department of Agriculture. Staff Report No. AGES 89-1.

ABSTRACT

This publication is a collection of 33 reports highlighting 1987 data compiled from the annual Farm Costs and Returns Survey (FCRS). The State and regional level reports focus on financial characteristics of farms and farm operators. A farm's economic status is evaluated using the net cash income position and the ratio of debts to assets relationship. Regional production expenditures are compared by farm type. A brief discussion of farm characteristics by region are also presented.

Keywords: Farm, net cash farm income, debt/asset ratio, farm production expenditures.

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Washington, DC 20250

January 1989

PREFACE

This report is one of several publications concerning the financial conditions and characteristics of U.S. farms and ranches available from the U.S. Department of Agriculture. Several other reports are listed below for your reference and purchase.

Other Publications	Agency	Telephone Number
Economic Indicators of the Farm Sector (5 issues)	ERS/USDA	301-953-2515
Farm Operating and Financial Characteristics, 1986	ERS/USDA	301-953-2515
Financial Characteristics of U.S. Farms, January 1, 1988	ERS/USDA	202-783-3238
Farm Production Expenditures	NASS/USDA	202-447-4021

This report was prepared by the Agriculture and Rural Economy Division, ERS, and Estimates Division, NASS. Principal authors of the report are Mitch Morehart (202-786-1801), Farm Sector Financial Analysis Branch, ERS, and Douglas Kleweno (202-447-4214), Economic Statistics Branch, NASS.

Other ERS and NASS colleagues contributing to the report are thanked for their reviews and suggestions. For further information on the findings, contact the authors or the nearest NASS State Statistical Office.

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State	State Statistician	Telephone Number
Alabama	J.T. Barr	205-832-7263
Arizona	B.L. Bloyd	602-241-2573
Arkansas	D.H. VonSteen	501-378-5145
California	H.J. Tippett	916-551-1533
Colorado	C.A. Hudson	303-964-0250
Florida	R.L. Freie	407-648-6013
Georgia	L.E. Snipes	404-546-2236
Idaho	D.G. Gerhardt	208-334-1507
Illinois	F.S. Barrett	217-492-4295
Indiana	R.W. Gann	317-494-8371
Iowa	D.M. Skow	515-284-4340
Kansas	M.E. Johnson	913-295-2600
Kentucky	D.D. Williamson	502-582-5293
Louisiana	A.D. Frank	318-473-7971
Maryland	M.B. West	301-841-5740
Michigan	D.J. Fedewa	517-377-1831
Minnesota	C.G. Rock	612-296-2230
Mississippi	G.R. Knight	601-965-4575
Missouri	P.A. Walsh	314-875-5233
Montana	L.H. Pratt	406-449-5303
Nebraska	J.L. Aschwege	402-437-5541
Nevada	C.R. Lies	702-784-5584
New Hampshire	A.R. Davis	603-224-9639
New Jersey	R.J. Battaglia	609-292-6385
New Mexico	C.E. Gore	505-523-8168
New York	R.E. Schooley	518-457-5570
North Carolina	J.L. Olson	919-856-4394
North Dakota	R.F. Carver	701-239-5306
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Oklahoma	R.P. Bellinghausen	405-525-9226
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Pennsylvania	W.C. Evans	717-787-3904
South Carolina	H.J. Power	803-765-5333
South Dakota	J.C. Ranek	605-330-4235
Tennessee	C.R. Brantner	615-736-5136
Texas	D.S. Findley	512-482-5581
Utah	D.J. Gneiting	801-524-5003
Virginia	R.A. Graham	804-786-3500
Washington	D.A. Hasslen	206-586-8919
West Virginia	J.J. Brueggen	304-348-2217
Wisconsin	C.D. Spencer	608-264-5317
Wyoming	S.J. Hundley	307-772-2181

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1987 Farm Costs and Returns Survey Data

Selected State and Region Highlights

INTRODUCTION

This publication represents a collection of data presented by selected State and regional levels as prepared jointly by the Economic Research Service (ERS) and National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture. The report first described the criteria for publishing financial data at the designated level followed by a discussion of the Farm Costs and Returns Survey (FCRS) procedures. Comparability, reliability, and definitions associated with these data are then presented. The collection of State and regional reports follow with highlights by region. The collection of four page summary reports were distributed by NASS through their State offices listed in the preface.

CRITERIA FOR PUBLICATION

A primary objective of this joint project was to provide respondents and other data users with a timely feedback of highlights of the findings from the Farm Costs and Returns Survey conducted in the spring of 1988. The data are presented at the State level where possible. The criteria for inclusion of a particular State are: (1) a target of 300 usable survey reports from farms and ranches sampled, (2) a minimum of thirty observations reported for a particular data cell and, (3) a coefficient of variation no greater than 50 percent for any data element. State data not generally meeting these standards are reported on a regional or sub-regional basis. The stability of survey sample sizes and sampling variability are also considered to ensure comparability with future reports of this nature.

The farm production region standard for most economic and labor statistics are used with some modest adjustments for other geographical considerations (figure 1). The major exception to the ten production region boundaries is the combining of Virginia and West Virginia (Appalachia region) with Maryland, Delaware, and New Jersey (Northeast). The Mountain region was also split into a northern and southern region for greater homogeneity.

Every attempt was to present data in a manner for comparison at the lowest possible level subject to data reliability and constraints. Expenditure data are only presented at the regional level. Farm income and other financial data are published as averages or ratios at the State, regional or U.S. levels. Demographic data are provided at the State and regional levels.

The variables selected for publication are limited to an overview of the financial performance of various types and sizes of farms. It is not intended to serve as an exhaustive or detailed presentation. In the preface,several other supporting publications are identified and should be referenced for such purposes.

SURVEY DESCRIPTION

The farm financial information contained in this publication is derived from the annual Farm Costs and Returns Survey (FCRS) conducted by the Department of Agriculture in February and March of 1988. During the nationwide survey, over 24,000 farms and ranches were contacted. The FCRS is an integrated survey which combines multiple versions of a questionnaire to simultaneously obtain production expenses, capital purchases, financial information, detailed production practice data, and other farm operating characteristics.

For the survey, a farm is defined as any establishment producing or selling at least $1,000 worth of agricultural products. Establishments included in the survey are those listed in the Federal Standard Industrial Code (SIC) for agricultural production of crops and major livestock group codes 01 and 02 respectively. This classification includes field crops, vegetables, fruits, and tree nuts, horticultural specialties, animal specialties, cattle, hogs, sheep, goats, horses, poultry, eggs, turkeys, milk, and honey.

A probability sample was drawn from a list of larger and also specialized type operations. Because not all farms are on the list, a second probability sample of small land areas was drawn to ensure complete coverage of the target population. Farm operators residing in these selected land areas, after adjusting for list duplication, represent farms not surveyed from the list sample.

Data collection procedures are uniform and consistent across the Nation by using extensive training and field supervision of data collectors. Efforts are also undertaken to minimize other nonsampling errors by using extensive edit and data analysis. The extent of nonsampling errors is not known or directly measurable.

Since the FCRS is a probability sample, each respondent represents a number of farms of similar size and type. Thus, sample data can be expanded by appropriate weights to represent the U.S. population of farm operators. Estimates based on the expanded sample differ from what would have occurred if a complete enumeration had been taken. Sampling variability can be measured by the coefficient of variation to provide a perspective on the reliability of the data.

DATA RELIABILITY AND COMPARABILITY

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys, the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

NASS production expenditure data differ from the Economic Research Service (ERS) total cash operating expense estimates because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases. The probability nature of the survey allows expansion of the data so as to represent the U.S. population of farm operators. This differs from other aggregate sources of information on the U.S. farm sector (for example: Economic Indicators of The Farm Sectors Series, USDA) since there is income, assets, and debt that are attributed to owners of resources used in production that are not captured in the FCRS as being associated with "farm operators."

Figure 1. Farm Production Regions

DEFINITIONS OF TERMS USED FOR FINANCIAL ANALYSIS OF FARM OPERATORS

Crop sales. Cash receipts from the sales of all crop commodities during 1987 plus net Commodity Credit Corporation loan receipts.

Farm business liabilities. All outstanding liabilities as of December 31, 1987, associated with the Production Credit Association, Farmers Home Administration, commercial banks, Federal land banks, merchants and dealers, life insurance companies, individuals who sold land, Commodity Credit Corporation, and any other lenders.

Farm business assets. Market value of owned land and buildings, farm equipment, livestock inventory, crop inventory, purchased inputs and supplies on hand, and other financial assets of the farm business.

Farm business net worth. Total farm business assets minus total farm business liabilities.

Gross cash farm income (GCFI). Crop and livestock sales plus other farm income.

Livestock sales. Cash receipts from the sales of all livestock and poultry products during 1987 including milk, eggs, wool, and honey.

Net cash farm income (NCFI). Gross cash farm income minus total cash farm operating expenses.

Nonfarm income. Includes the net income from an off farm business, off-farm wages and salaries, interest and dividend earnings, and any other source of off-farm income such as rental properties and Social Security retirement.

Other farm income. Government payments (including PIK certificates), income from custom work and machine hire, non-contract livestock grazing, income received under contractual arrangements, income from land rented to others, and income from hunting, fishing, and other outdoor recreation.

Total cash farm operating expenses. Variable and fixed cash outlays, excluding principal, associated with the operation of the farm business, including interest, labor, feed, seed, repairs and maintenance, fuels and oils, utilities, transportation and storage, rent and lease payments, supplies, livestock purchased, veterinary fees, fertilizer and chemicals, machine-hire, and other miscellaneous expenses.

NORTHEAST

The Northeast farm operators represented 8 percent of all U.S. farms in 1987. Dairy farms were the most common livestock production specialty, while other crop farms (which consist of potatoes, hay silage, forage, or a nonspecialized combination of field crops and cash grains) were the most common among crop specialties. Two-thirds of farms had gross sales below $40,000 which was identical to the U.S. distribution by economic class. Ninety percent were organized as individual farm operations, 8 percent as partnerships, and 2 percent as corporations. Over half of all farms operated less than 100 acres and only 2 percent farmed more than 1,000 acres. Sixty percent of farm operators owned all of the land they operated. Full tenants accounted for 6 percent of all farms and the remaining 34 percent of farms were partial owners of the land they farmed in 1987.

Half of total land operated in the Northeast was devoted to crop acreage, 14 percent to pasture, 3 percent was idle under Government programs, and the remainder went for summer fallow, woodland or some other use. Northeast farm operators accounted for 10 percent of U.S. livestock sales and 4 percent of crop sales in 1987. Noncitrus fruits and nuts, vegetables, and other crops accounted for the largest proportion of 1987 crop sales in the Northeast at 25, 20, and 18 percent, respectively. Milk and dairy products represent nearly three-fourths of gross sales of livestock and poultry products. Farms participating in Government programs received 2 percent of total payments. Thirteen percent participated in Government programs. Nonfarm income represented 8 percent of total nonfarm income reported by all farm operators. The typical farm operator was 52 years old and devoted an average of 38 hours per week to working on the farm. Forty-five percent considered farming a secondary occupation. Almost 90 percent of farms reported nonfarm income in 1987.

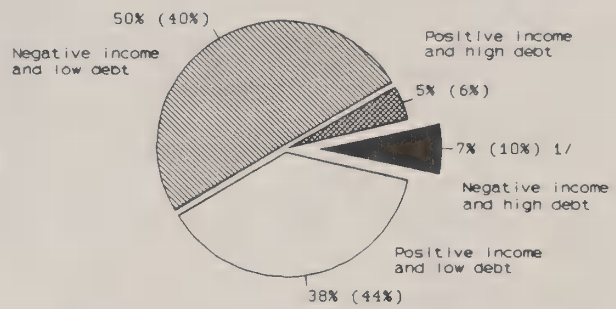
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: PENNSYLVANIA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF PENNSYLVANIA FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Pennsylvania Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-eight percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 7 percent were classified in the weakest financial position. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 44 percent of Pennsylvania farmers were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Pennsylvania farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
NY, PA	57	7	32	4
New England	39	3	57	1
Northeast	43	5	47	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected Average operating and financial characteristics

Item	New England States	NY, PA	PA	Northeast	U.S.
			Acres per farm		
Acres operated 1/	200	280	130	180	450
			Dollars per farm		
Crop sales	26,400	14,700	9,800	14,200	28,900
+ Livestock sales	34,300	63,100	37,000	42,800	29,500
+ Other farm income	2,600	3,300	2,100	2,500	11,800
= Gross cash farm income	63,200	81,100	48,900	59,500	70,200
- Cash operating expenses	53,300	64,300	36,000	46,300	53,300
= Net cash farm income	9,900	16,800	12,900	13,300	16,900
Nonfarm income	28,000	21,600	25,200	24,900	24,900
Net worth	605,500	477,700	228,300	362,100	296,800
			Ratio		
Debt/asset rat	0.08	0.11	0.13	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Over half of Pennsylvania farm operators had negative net cash incomes in 1987. Nearly 90 percent of the farms with negative cash income had a relatively low debt level. Average nonfarm income was nearly twice the average net cash earnings from farming. Average nonfarm income for Pennsylvania was slightly higher than for all U.S. farm households. While only twelve percent of Pennsylvania farms had high debt levels, the average debt/asset ratio of 0.13 was the highest in the region.

The average farm size in Pennsylvania was 130 acres, 77 percent of which were owned by the operator. On average, farms with positive net incomes operated more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $48,900 and average net cash income was $12,900. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes. Nonfarm income averaged $25,200 for the State.

Table 2--Average operating and financial characteristics of Pennsylvania farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	38	5	50	7	100
Economic class:					
$40,000 or more	67	12	13	8	100
Less than $40,000	26	d	66	d	100
Type of farm:					
Cash grain	28	d	67	d	100
All crops	38	2	53	7	100
Dairy	64	9	19	8	100
All livestock or poultry	38	6	49	7	100
			Acres per farm		
Operating:					
Acres owned	140	70	70	60	100
Acres operated	190	200	90	90	130
			Years		
Operator age	51	39	54	43	52
			Dollars per farm		
Financial:					
Crop sales	21,600	6,000	2,500	1,100	9,800
Livestock sales	69,200	104,000	8,400	24,300	37,000
Other farm income	4,300	2,700	400	1,800	2,100
Gross cash farm income	95,100	112,600	11,300	27,300	48,900
Cash operating expenses	55,700	79,100	17,500	34,100	36,000
Net cash farm income	39,400	33,500	-6,200	-6,900	12,900
Nonfarm income	16,400	11,400	32,900	26,000	25,200
Total assets	335,400	270,100	223,900	133,800	262,100
Total debt	32,800	145,500	17,400	84,900	33,800
			Ratio		
Ratios:					
Debt/asset	0.10	0.54	0.08	0.63	0.13
Cash expenses/gross income	.59	.70	1.55	1.25	.74
Interest/gross income	.03	.10	.14	.21	.06

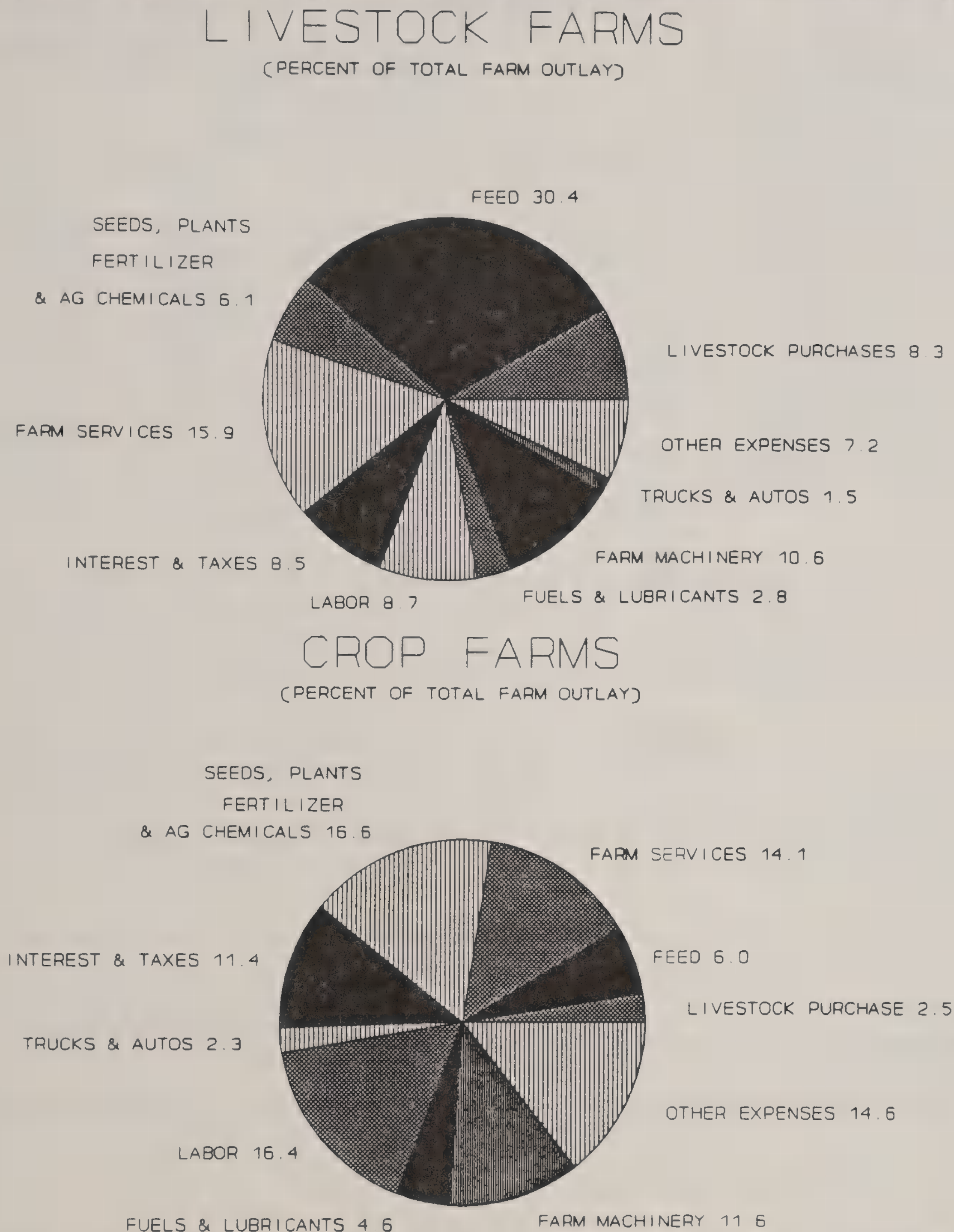
d = Insufficient data for disclosure.

The ratio of expenses to gross income was higher for the positive income, high debt group (0.70), compared with the positive income, low debt group (0.59). Those with high debt levels had higher gross incomes than farms with low debt levels, but the high debt level farms had much lower net farm incomes largely because of interest expense. The ratio of interest expense to gross income for operations with positive incomes and high debt was 0.10, indicating that one-tenth of their gross income paid interest expenses for borrowed capital. The remaining low debt farms with positive incomes earned the highest net cash income, a result of having the lowest ratio of operating expenses to gross income of any group.

Pennsylvania farms in the largest economic classes ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 67 percent, than farms in the smaller economic class, 26 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Compared with all livestock farms, operations that specialized in the production of dairy products had a larger proportion of farms in the most financially favorable position (64 percent). Cash grain producers had a lower percentage in the strongest financial position when compared with all crop farms. The distribution of crop and livestock farms across financial categories was nearly identical.

Figure 2--Northeast Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Northeast totaled $8.1 billion, up 2.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northeast region included the following States: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, and VT. Increased regional expenses for livestock purchases; feed; chemicals; taxes; farm supplies; building and fencing; and farm machinery were partially offset by the remaining major expenses. Expenditures by livestock farms at $6.1 billion were 76 percent of the total regional expenses. Major expense items on livestock farms were feed (30 percent) and farm services (16 percent). About one-half of the crop farm expenses in the Northeast were for seeds, plants fertilizer and chemicals (17 percent), labor (16 percent), and farm services (14 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northeast

Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, AND VT)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	1,958,352	6,105,065	8,063,417
Livestock and poultry	48,889	507,684	556,573
Feed	117,995	1,855,157	1,973,152
Farm services	275,612	972,040	1,247,652
Ag. chemicals and sprays	76,975	85,187	162,162
Fertilizer	134,770	201,321	336,091
Interest	116,772	346,524	463,296
Taxes (property and real estate)	107,024	168,268	275,292
Labor	321,038	532,522	853,560
Fuels and lubricants	89,059	170,660	259,719
Farm supplies (other)	85,549	108,588	194,137
Building and fencing (other)	180,068	269,837	449,905
Farm and land improvements (other)	11,187	38,689	49,876
Total farm machinery	227,434	645,607	873,041
Seeds	113,676	87,357	201,033
Trucks and autos	44,148	91,889	136,037
Other unallocated expenses	8,156	23,733	31,889

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

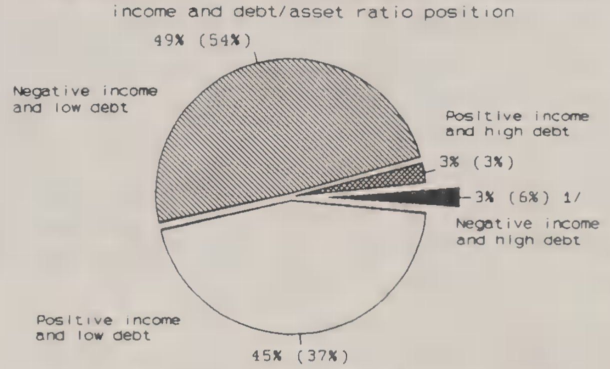
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: DELMARVA, WEST VIRGINIA, NEW JERSEY

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF FARMS IN DELAWARE, MARYLAND, NEW JERSEY, VIRGINIA, AND WEST VIRGINIA IMPROVED DURING 1987, according to a survey conducted each State's Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-five percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 3 percent experienced financial difficulties. An additional 3 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 37 percent of the region's farmers were in the most favorable financial situation, while 6 percent were classified in the weakest position.

Figure 1--Distribution of Delaware, Maryland, New Jersey, Virginia, and West Virginia farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
NY, PA	57	7	32	4
New England	39	3	57	1
Northeast	43	5	47	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results
2/ Low debt defined as a debt/asset ratio of 0.40 or less
3/ High debt defined as a debt/asset ratio above 0.40

Table 1--Selected Average operating and financial characteristics

Item	New England	NY, PA	PA	DE,MD,NJ, VA,WV	Northeast	U.S.
			Acres per farm			
Acres operated 1/	200	280	130	200	180	450
			Dollars per farm			
Crop sales	26,400	14,700	9,800	36,900	14,200	28,900
+ Livestock sales	34,300	63,100	37,000	13,800	42,800	29,500
+ Other farm income	2,600	3,300	2,100	4,600	2,500	11,800
= Gross cash farm income	63,200	81,100	48,900	55,300	59,500	70,200
- Cash operating expenses	53,300	64,300	36,000	40,600	46,300	53,300
= Net cash farm income	9,900	16,800	12,900	14,700	13,300	16,900
Nonfarm income	28,000	21,600	25,200	23,900	24,900	24,900
Net worth	605,500	477,700	228,300	392,300	362,100	296,800
				Ratio		
Debt/asset ratio	0.08	0.11	0.13	0.06	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987 52 percent of farms had negative net cash farm incomes compared with 60 percent a year earlier. Average nonfarm income for the region was nearly $1,000 more than for all U.S. farm households. Only six percent of the surveyed farms in the region had high debt levels which was two-fifths the U.S. percentage. The average debt/asset ratio was also two-fifths the U.S. average. Unlike other Northeast States, average crop sales exceeded the sales of livestock products.

The average farm size in the region was 190 acres, 69 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned only 29 percent of acres operated. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. On average, nonfarm income was higher than gross cash farm earnings for negative income farms. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Delaware, Maryland, New Jersey, Virginia, and West Virginia farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	45	3	49	3	100
Economic class:					
$40,000 or more	55	17	24	4	100
Less than $40,000	43	d	54	d	100
Type of farm:					
Cash grain	43	7	35	15	100
All crops	43	4	45	8	100
Beef, hog, or sheep	46	d	52	d	100
All livestock or poultry	46	d	51	d	100
			Acres per farm		
Operating:					
Acres owned	150	130	120	60	130
Acres operated	220	330	160	210	190
			Years		
Operator age	56	45	54	44	54
			Dollars per farm		
Financial:					
Crop sales	59,800	233,800	4,100	16,400	36,900
Livestock sales	18,600	35,400	8,400	5,300	13,800
Other farm income	6,700	28,000	1,200	5,100	4,600
Gross cash farm income	85,100	297,200	13,700	26,700	55,300
Cash operating expenses	50,900	163,700	22,900	43,300	40,600
Net cash farm income	34,300	133,500	-9,300	-16,500	14,700
Nonfarm income	19,900	16,600	26,600	51,200	23,900
Total assets	465,700	294,200	395,700	200,800	418,900
Total debt	19,200	174,800	18,500	125,500	26,600
			Ratio		
Ratios:					
Debt/asset	0.04	0.59	0.05	0.63	0.06
Cash expenses/gross income .	.60	.55	1.68	1.62	.73
Interest/gross income	.02	.04	.13	.36	.04

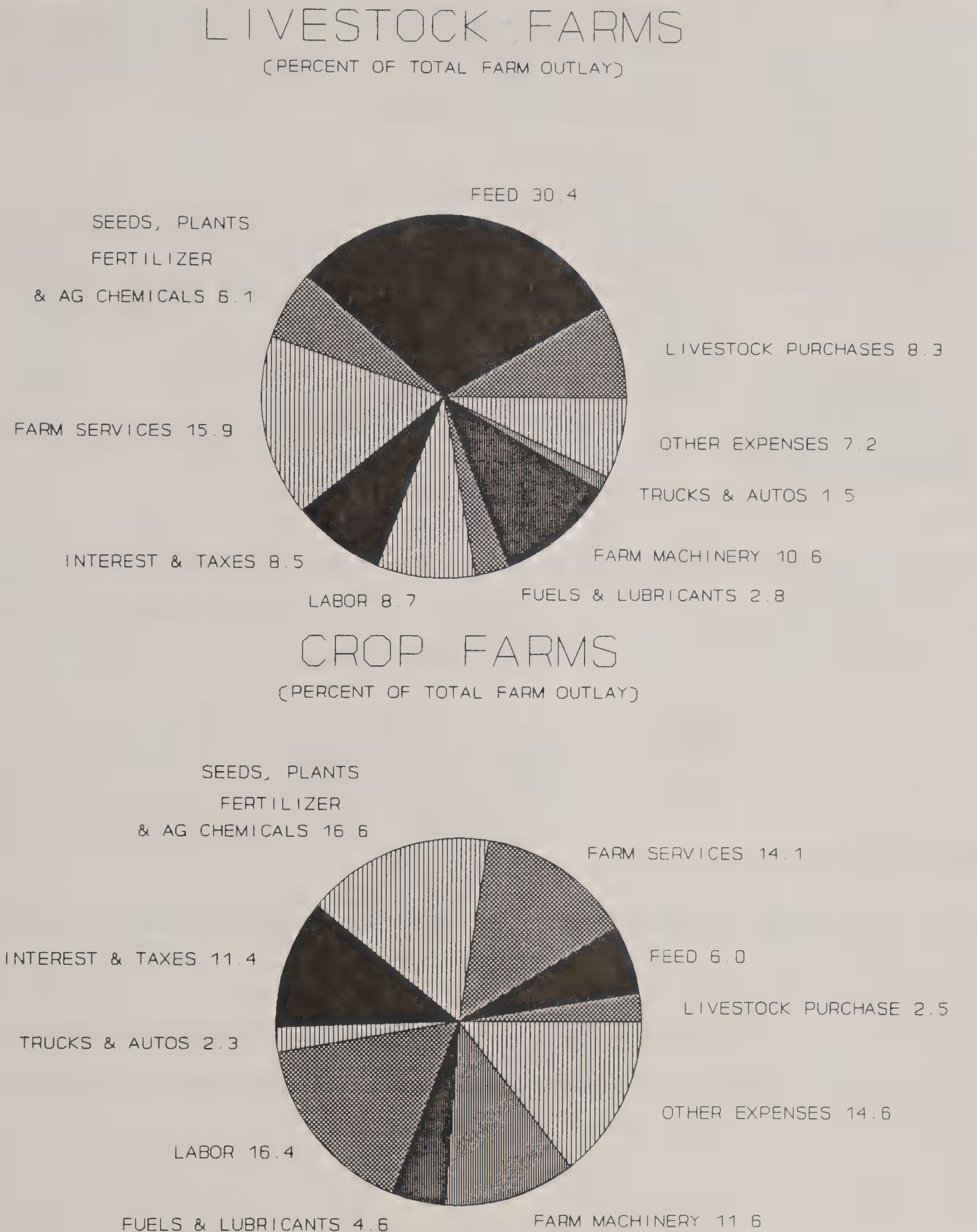
d = Insufficient data for disclosure.

The ratio of expenses to gross income was lower for the positive income, high debt group (0.55), compared with the positive income, low debt group (0.60). Farms in the least favorable financial position had the highest nonfarm income. Those with high debt levels had much higher gross incomes than farms with low debt levels as well as higher net farm incomes. The ratio of interest expense to gross income for farms in the weakest financial position was 0.36, indicating that more than one-third of their gross income paid interest expenses for borrowed capital.

The region's farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 55 percent, than farms in the smaller economic class, 43 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Livestock operations had the largest proportion of farms which were in the most financially favorable position. Although cash grain farms had relatively low debt levels, many of them still had negative farm incomes in 1987; 35 percent had low debt and negative farm incomes.

Figure 2--Northeast Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Northeast totaled $8.1 billion, up 2.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northeast region included the following States: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, and VT. Increased regional expenses for livestock purchases; feed; chemicals; taxes; farm supplies; building and fencing; and farm machinery were partially offset by the remaining major expenses. Expenditures by livestock farms at $6.1 billion were 76 percent of the total regional expenses. Major expense items on livestock farms were feed (30 percent) and farm services (16 percent). About one-half of the crop farm expenses in the Northeast were for seeds, plants fertilizer and chemicals (17 percent), labor (16 percent), and farm services (14 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northeast

Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, AND VT)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	1,958,352	6,105,065	8,063,417
Livestock and poultry	48,889	507,684	556,573
Feed	117,995	1,855,157	1,973,152
Farm services	275,612	972,040	1,247,652
Ag. chemicals and sprays	76,975	85,187	162,162
Fertilizer	134,770	201,321	336,091
Interest	116,772	346,524	463,296
Taxes (property and real estate)	107,024	168,268	275,292
Labor	321,038	532,522	853,560
Fuels and lubricants	89,059	170,660	259,719
Farm supplies (other)	85,549	108,588	194,137
Building and fencing (other)	180,068	269,837	449,905
Farm and land improvements (other)	11,187	38,689	49,876
Total farm machinery	227,434	645,607	873,041
Seeds	113,676	87,357	201,033
Trucks and autos	44,148	91,889	136,037
Other unallocated expenses	8,156	23,733	31,889

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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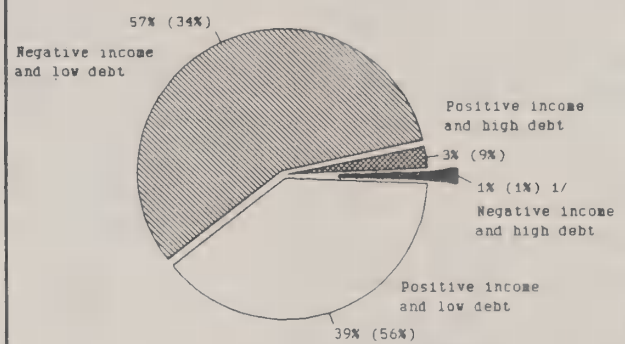
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NEW ENGLAND STATES

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF FARMS IN NEW ENGLAND (CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT) REMAINED FAVORABLE DURING 1987, according to a survey conducted by each State's Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-nine percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. Only one percent of farms in these States were classified in the weakest financial position. An additional 3 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. A year ago, 56 percent of farms were in the most favorable financial situation, while one percent were classified in the weakest position.

Figure 1--Distribution of New England farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Pennsylvania	38	5	50	7
NY, PA	57	7	32	4
Northeast	43	5	47	5
U S	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less
3/ High debt defined as a debt/asset ratio above 0.40

Table 1--Selected Average operating and financial characteristics

Item	New England States	NY, PA	PA	Northeast	U.S.
			Acres per farm		
Acres operated 1/	200	280	130	180	450
			Dollars per farm		
Crop sales	26,400	14,700	9,800	14,200	28,900
+ Livestock sales	34,300	63,100	37,000	42,800	29,500
+ Other farm income	2,600	3,300	2,100	2,500	11,800
= Gross cash farm income	63,200	81,100	48,900	59,500	70,200
- Cash operating expenses	53,300	64,300	36,000	46,300	53,300
= Net cash farm income	9,900	16,800	12,900	13,300	16,900
Nonfarm income	28,000	21,600	25,200	24,900	24,900
Net worth	605,500	477,700	228,300	362,100	296,800
			Ratio		
Debt/asset ratio	0.08	0.11	0.13	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987, 42 percent of New England farms had a positive net cash farm income, compared with 65 percent a year earlier. The majority of farms with negative incomes had low debt levels. Average nonfarm income was almost three times average net cash earnings from farming and the highest in the region. Only 4 percent of New England farms had high debt levels, down from 10 percent in 1986. Average net worth of $605,500 was twice the U.S. value and the highest in the region.

Table 2--Average operating and financial characteristics for New England farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	39	3	57	1	100
Economic class:					
$40,000 or more	70	13	12	5	100
Less than $40,000	28	0	71	0	100
Type of farm:					
Specialty crops 1/	43	d	56	d	100
All crops	39	d	59	d	100
Beef, hog, or sheep	9	d	90	d	100
All livestock or poultry	38	d	52	d	100
			Acres per farm		
Operating:					
Acres owned	220	550	90	470	170
Acres operated	280	640	110	480	200
			Years		
Operator age	52	42	54	49	53
			Dollars per farm		
Financial:					
Crop sales	41,300	221,900	3,200	66,400	26,400
Livestock sales	60,600	169,600	7,800	43,500	34,300
Other farm income	4,000	3,700	1,600	d	2,600
Gross cash farm income	105,900	395,200	12,500	110,900	63,200
Cash operating expenses	72,200	277,600	24,000	153,000	53,300
Net cash farm income	33,600	117,600	-11,500	-42,100	9,900
Nonfarm income	26,200	6,900	30,800	21,000	28,000
Total assets	797,800	860,300	549,800	440,200	654,600
Total debt	47,900	411,100	23,100	227,300	49,100
			Ratio		
Ratios:					
Debt/asset	0.06	0.48	0.04	0.52	0.08
Cash expenses/gross income	.68	.70	1.92	1.38	.84
Interest/gross income	.04	.07	.10	.16	.05

d = Insufficient data for disclosure.
1/ Farms that specialized in the production of vegetables, fruits, or tree nuts, and nursery or greenhouse items.

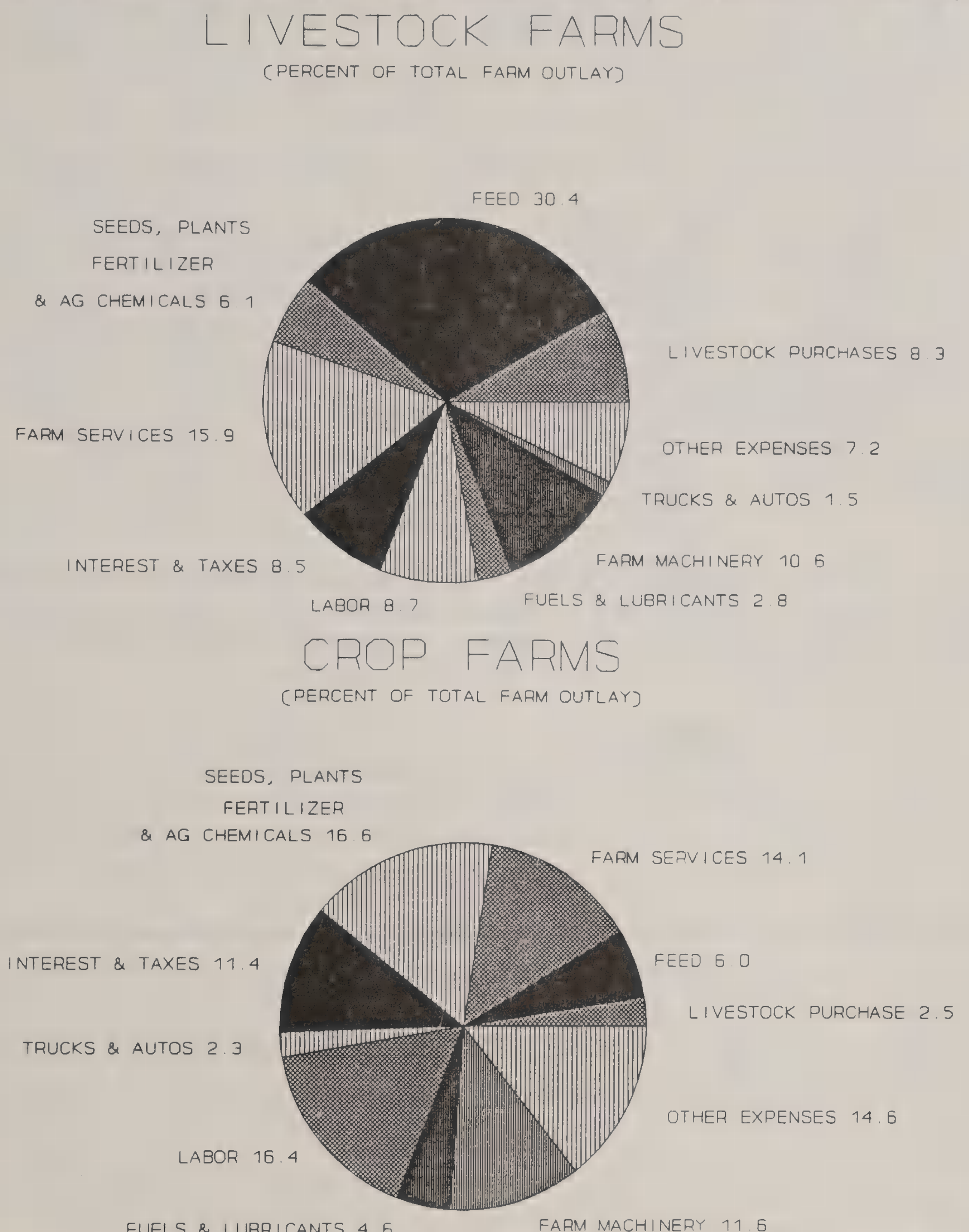
The average farm size in New England was 200 acres, 85 percent of which were owned by the operator. On average, farms with high debt owned and operated more acreage than did low debt farms. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $63,200 and average net cash income was $9,900. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes. Nonfarm income ranged from $6,900 for positive income, high debt farms to over $30,000 for operations with negative incomes and low debt.

The ratio of expenses to gross income was highest for the negative income, low debt group (1.92), and lowest for operations with positive incomes and low debt (0.68). Those with high debt levels had higher gross incomes than farms with low debt levels, but the high debt level farms had much lower net cash farm incomes largely because of interest expense. The ratio of interest expense to gross income for farms in the weakest financial position was 0.16, indicating that sixteen percent of their gross income paid interest expenses for borrowed capital.

Farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 70 percent, than farms in the smaller economic class, 28 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Seventy-one percent of farms with gross farm earnings under $40,000 had negative incomes and low debt.

Compared with all livestock farms, operations that specialized in the production of beef, hogs, or sheep had a considerably lower proportion of farms in the most financially favorable position. Cash grain producers had a lower percentage in the strongest financial position when compared with all crop farms. The distribution of crop and livestock farms across financial categories was nearly identical.

Figure 2--Northeast Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Northeast totaled $8.1 billion, up 2.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northeast region included the following States: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, and VT. Increased regional expenses for livestock purchases; feed; chemicals; taxes; farm supplies; building and fencing; and farm machinery were partially offset by the remaining major expenses. Expenditures by livestock farms at $6.1 billion were 76 percent of the total regional expenses. Major expense items on livestock farms were feed (30 percent) and farm services (16 percent). About one-half of the crop farm expenses in the Northeast were for seeds, plants fertilizer and chemicals (17 percent), labor (16 percent), and farm services (14 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northeast

Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, AND VT)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	1,958,352	6,105,065	8,063,417
Livestock and poultry	48,889	507,684	556,573
Feed	117,995	1,855,157	1,973,152
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Ag. chemicals and sprays	76,975	85,187	162,162
Fertilizer	134,770	201,321	336,091
Interest	116,772	346,524	463,296
Taxes (property and real estate)	107,024	168,268	275,292
Labor	321,038	532,522	853,560
Fuels and lubricants	89,059	170,660	259,719
Farm supplies (other)	85,549	108,588	194,137
Building and fencing (other)	180,068	269,837	449,905
Farm and land improvements (other)	11,187	38,689	49,876
Total farm machinery	227,434	645,607	873,041
Seeds	113,676	87,357	201,033
Trucks and autos	44,148	91,889	136,037
Other unallocated expenses	8,156	23,733	31,889

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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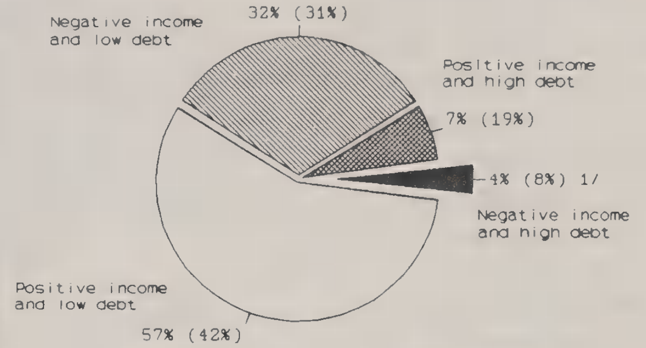
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NEW YORK, PENNSYLVANIA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF NEW YORK AND PENNSYLVANIA FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Pennsylvania Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-seven percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 4 percent were classified in the weakest financial position. An additional 7 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. A year ago only 42 percent of farms were in the most favorable financial situation, while 8 percent were classified in the weakest position.

Figure 1--Distribution of New York and Pennsylvania farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Pennsylvania	38	5	50	7
New England	39	3	57	1
Northeast	43	5	47	5
U.S.	49	[illegible]	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected Average operating and financial characteristics

Item	New England States	NY, PA	PA	Northeast	U.S.
			Acres per farm		
Acres operated 1/	200	280	130	180	450
			Dollars per farm		
Crop sales	26,400	14,700	9,800	14,200	28,900
+ Livestock sales	34,300	63,100	37,000	42,800	29,500
+ Other farm income	2,600	3,300	2,100	2,500	11,800
= Gross cash farm income	63,200	81,100	48,900	59,500	70,200
- Cash operating expenses	53,300	64,300	36,000	46,300	53,300
= Net cash farm income	9,900	16,800	12,900	13,300	16,900
Nonfarm income	28,000	21,600	25,200	24,900	24,900
Net worth	605,500	477,800	228,300	362,100	296,800
			Ratio		
Debt/asset ratio	0.08	0.11	0.13	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Nearly two-thirds of New York and Pennsylvania farm operators had positive net cash incomes in 1987. The majority of farms with negative incomes (89 percent) had a relatively low debt level. Average nonfarm income was $3,300 lower than for all U.S. farm households. Eleven percent of New York and Pennsylvania farms had high debt levels, which was below the U.S percentage. Average net worth was over $150,000 higher than for all U.S. farms in 1987.

The average farm size in New York and Pennsylvania was 280 acres, 75 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $81,100 and average net cash income was $16,800. Nonfarm income ranged from $1,500 for farms in the weakest financial position to over $25,000 for farms with negative incomes and low debt.

Table 2--Average operating and financial characteristics for New York and Pennsylvania farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	57	7	32	4	100
Economic class:					
$40,000 or more	69	12	13	7	100
Less than $40,000	41	d	58	d	100
Type of farm:					
Cash grain	46	9	45	0	100
All crops	58	d	38	d	100
Dairy	68	12	15	5	100
All livestock or poultry	56	9	30	5	100
			Acres per farm		
Operating:					
Acres owned	250	200	130	270	210
Acres operated	310	330	200	360	280
			Years		
Operator age	51	41	53	41	51
			Dollars per farm		
Financial:					
Crop sales	20,000	8,300	6,900	15,800	14,700
Livestock sales	74,800	122,600	24,000	108,700	63,100
Other farm income	3,200	8,500	1,700	7,300	3,300
Gross cash farm income	98,000	139,400	32,600	131,800	81,100
Cash operating expenses	63,600	109,500	45,300	153,400	64,300
Net cash farm income	34,500	29,900	-12,800	-21,700	16,800
Nonfarm income	22,200	10,200	25,400	1,500	21,600
Total assets	600,800	392,400	454,700	484,800	534,200
Total debt	36,600	202,400	27,200	330,500	56,500
			Ratio		
Ratios:					
Debt/asset	0.06	0.52	0.06	0.68	0.11
Cash expenses/gross income	.65	.79	1.39	1.16	.79
Interest/gross income	.03	.12	.08	.20	.06

d = Insufficient data for disclosure.

The ratio of expenses to gross income was higher for the positive income, high debt group (0.79), compared with the positive income, low debt group (0.65). Those with high debt levels had higher gross incomes than farms with low debt levels, but the high debt level farms had much lower net farm incomes largely because of interest expense. The ratio of interest expense to gross income for this group was 0.12, indicating that twelve percent of their gross income paid interest expenses for borrowed capital. The remaining low debt farms earned the highest net cash income, a result of having the lowest ratio of operating expenses to gross income of any group.

New York and Pennsylvania farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 69 percent, than farms in the smaller economic class, 41 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Compared with all livestock farms, operations that specialized in the production of dairy products had a larger proportion of farms in the most financially favorable position (68 percent). Cash grain producers had a lower percentage in the strongest financial position when compared with all crop farms. The distribution of crop and livestock farms across financial categories was similar.

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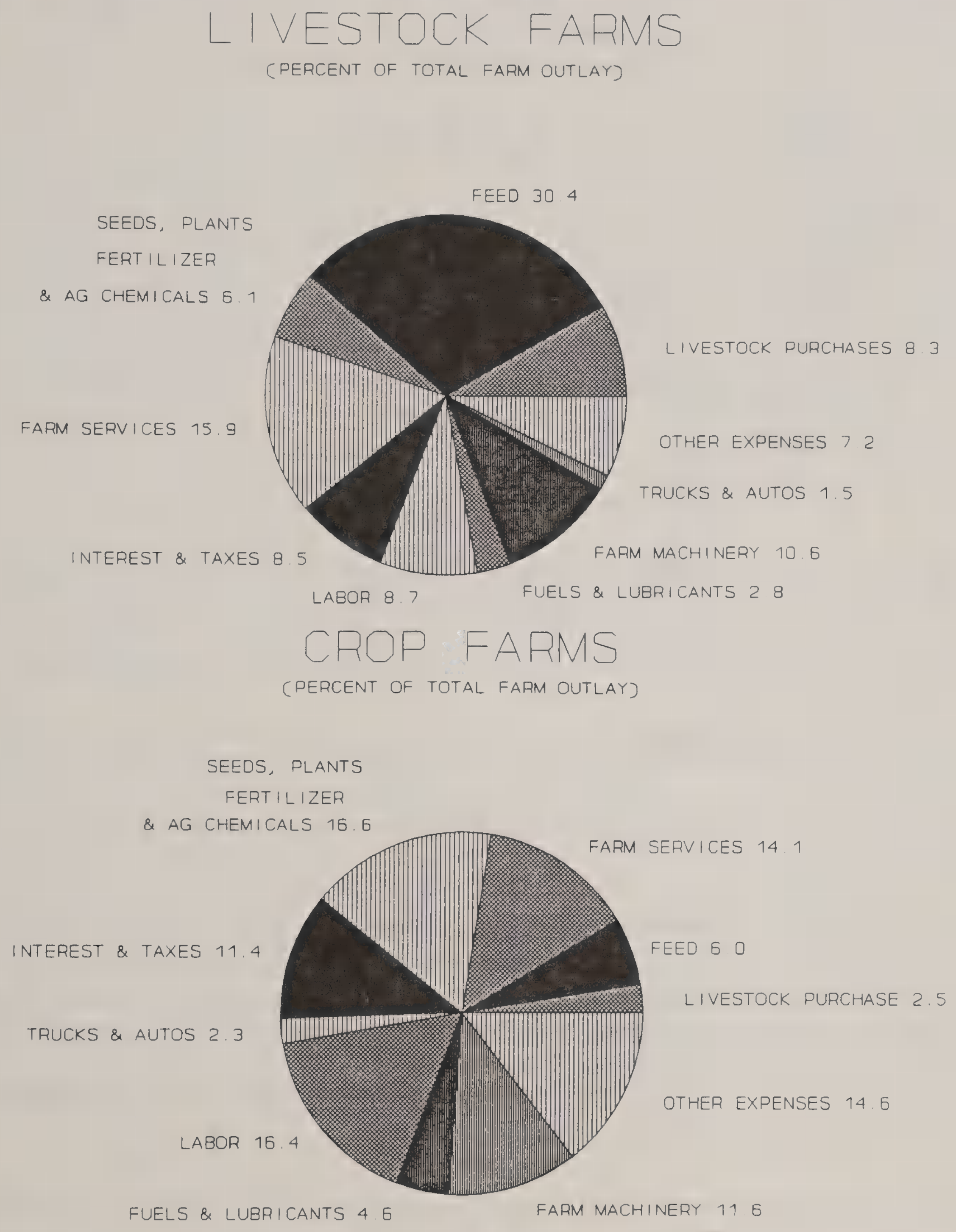

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LAKE STATES

The Lake States represented 12 percent of all U.S. farms in 1987. Livestock farms outnumbered crop farms by a margin of two to one. Dairy and beef, hog, or sheep specialties were the most common livestock enterprises, while cash grain producers accounted for over 60 percent of crop farms. The most common farm size in terms of gross sales were the less than $10,000 category (34 percent) and the $40,000 - $99,999 class (23 percent). Ninety-two percent of farms were organized as individual operations, 6 percent as partnerships, and 2 percent as corporations. Nearly one-third of farms operated less than 100 acres, while 87 percent of all farms in the Lake States were less than 500 acres. Over half of farm operators owned all of the land they operated in 1987. Full tenants represented 9 percent of all farms and the remaining 37 percent of farm operators were partial owners of total land operated.

Sixty percent of total land operated in the Lake States was devoted to crop acreage, 10 percent to pasture, 11 percent was idle under Government programs, and the remainder went for summer fallow, woodland or some other use. Farm operators in the Lake States accounted for 15 percent of U.S. livestock sales and 8 percent of crop sales. Corn and soybeans each accounted for 20 percent of crop sales in the Lake States. The highest ranking livestock and poultry products in terms of gross sales were milk and dairy products (60 percent), calves and cattle (17 percent), and hogs and pigs (12 percent). Nearly 50 percent of farm operator participated in Government programs, accounting for 13 percent of total payments. The typical farm operator was 49 years old and averaged working 43 hours per week on the farm. Two-thirds of farm operators considered farming their primary occupation. Over 90 percent reported nonfarm earnings which represented 10 percent of all U.S. farm operator household off-farm income.

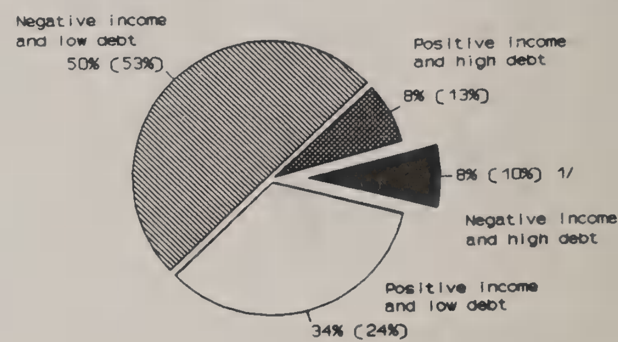
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: MICHIGAN

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF MICHIGAN FARMS IMPROVED DURING 1987, according to a survey conducted by the Michigan Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over one-third of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 8 percent were in the weakest position. An additional 8 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 24 percent of Michigan farms were in the most favorable financial position, while 10 percent were classified in the weakest category.

Figure 1--Distribution of Michigan farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Minnesota	45	13	28	14
Wisconsin	56	16	22	6
Lake States	47	12	31	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	MI	MN	WI	Lake States	U.S.
			Acres per farm		
Acres operated 1/	240	280	230	250	450
			Dollars per farm		
Crop sales	26,800	20,900	7,500	17,600	28,900
+ Livestock sales	40,000 2/	31,400	55,900	41,900 2/	29,500
+ Other farm income	9,100	13,200	7,300	10,200	11,800
= Gross cash farm income	75,900 2/	65,500	70,700	69,700 2/	70,200
- Cash operating expenses	58,000	49,900	50,900	52,100	53,300
= Net cash farm income	17,900 2/	15,600	19,800	17,600 2/	16,900
Nonfarm income	27,400	20,400	15,900	20,400	24,900
Net worth	236,500	195,900	243,100	221,700	296,800
			Ratio		
Debt/asset ratio	0.21	0.24	0.20	0.22	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others. 2/ Estimates were revised.

More than half of Michigan farm operators had negative net cash income in 1987, and nearly 85 percent of those with negative income had a relatively low debt level. The State's net cash income from farming averaged $17,900, which was above the national average of $16,900. The average debt/asset ratio of 0.21 was an improvement over Michigan's value of 0.27 year earlier.

The average farm size in Michigan was 240 acres, two-thirds of which were owned by the operator. On average, farms with positive incomes and high debt owned and operated more acreage than did other farms. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. Average gross cash farm income ranged from $13,500 for negative income, low debt farms to $297,700 for operations with positive incomes and high debt levels. Average nonfarm income was highest for farms with negative incomes and low debt levels.

Table 2--Average operating and financial characteristics of Michigan farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	34	8	50	8	100
Economic class:					
$40,000 or more	54	22	14	10	100
Less than $40,000	26	3	63	8	100
Type of farm:					
Cash grain	33	9	45	13	100
All crops	35	8	48	9	100
Dairy	64	d	16	d	100
All livestock or poultry	32	9	51	8	100
			Acres per farm		
Operating:					
Acres owned	190	390	120	110	160
Acres operated	270	580	140	330	240
			Years		
Operator age	54	40	55	45	52
			Dollars per farm		
Financial: 1/					
Crop sales	30,300	147,600	4,400	27,900	26,800
Livestock sales	78,800	109,600	6,300	16,200	40,000
Other farm income	11,200	40,500	2,900	7,100	9,100
Gross cash farm income	120,300	297,700	13,600	51,100	75,900
Cash operating expenses	60,500	250,000	22,400	70,100	58,000
Net cash farm income	59,800	47,700	-8,800	-19,000	17,900
Nonfarm income	19,700	21,400	35,000	18,600	27,400
Total assets	333,100	617,600	234,800	249,500	300,500
Total debt	27,600	389,400	20,300	147,500	64,000
			Ratio		
Ratios: 1/					
Debt/asset	0.08	0.63	0.09	0.59	0.21
Cash expenses/gross income	.50	.84	1.66	1.37	.76
Interest/gross income	.03	.10	.14	.24	.07

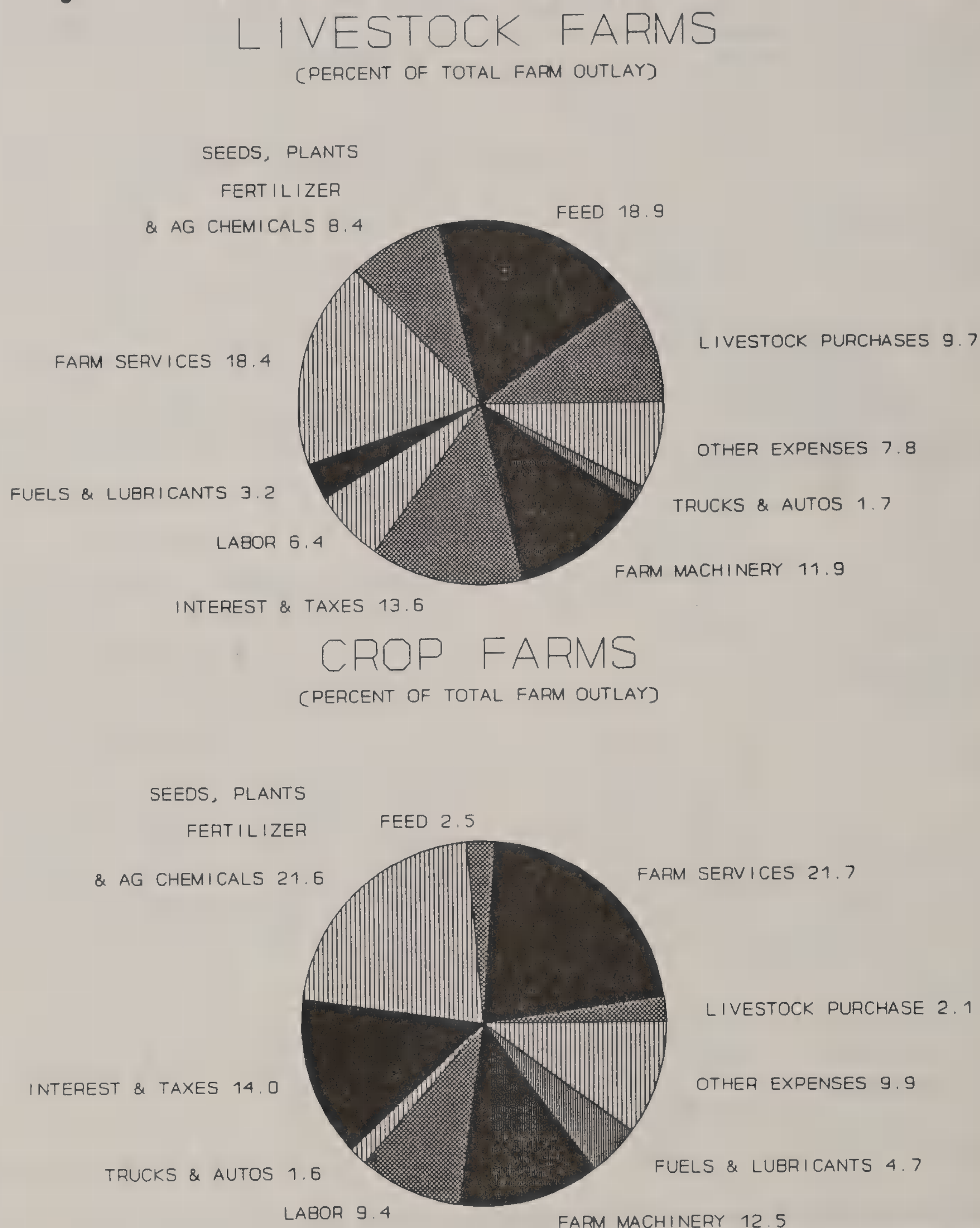
d = Insufficient data for disclosure.
1/ Estimates were revised.

The ratio of expenses to gross income was higher for the positive income, high debt group (0.84) than for the positive income, low debt group (0.50). The ratio of interest expense to gross income for farms with high debt but positive income was 0.10, indicating that one-tenth of their gross income paid interest expenses for borrowed capital. In contrast, farms in the most favorable financial position paid only 3 cents per dollar of gross income in interest, and those in the weakest position paid 24 cents.

Michigan farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 54 percent, than farms in the smaller economic class, 26 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop and livestock farms shared a similar distribution across financial categories. Cash grain operations had greater financial difficulties than all crop farms with a larger percentage in the weakest financial position and a lower proportion in the most favorable financial position. Dairy farms had twice the percentage of all livestock farms in the strongest financial position.

Figure 2--Lake States Farm Production Expenditures by Farm Type



Farm production expenditures in the Lake States totaled $12.4 billion in 1987, up 6.7 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Lake States included the following States: MI, MN, and WI. Lower regional expenditures in farm services, fertilizer, interest, fuels, and farm supplies were more than offset by increases in the remaining major expenses. Expenditures by livestock farms at $8.0 billion were 65 percent of the total regional expenses. Major expense items on livestock farms were feed (19 percent); farm services (18 percent); and interest and taxes (14 percent). Crop farm expenditures totaled $4.4 billion, 35 percent of the regional expenses. Nearly one-half of the crop farm expenses were for farm services and seed, plants, fertilizer and chemicals (22 percent, respectively).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Lake States

Lake States (MI, MN AND WI)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,358,617	8,022,143	12,380,760
Livestock and poultry	90,405	779,526	869,931
Feed	109,131	1,512,086	1,621,217
Farm services	946,460	1,477,164	2,423,624
Ag. chemicals and sprays	256,606	166,743	423,349
Fertilizer	352,312	314,983	667,295
Interest	423,572	782,349	1,205,921
Taxes (property and real estate)	188,140	307,347	495,487
Labor	409,734	515,971	925,705
Fuels and lubricants	205,455	259,113	464,568
Farm supplies (other)	88,886	142,868	231,754
Building and fencing (other)	82,223	286,199	368,422
Farm and land improvements (other)	26,890	70,479	97,369
Total farm machinery	543,493	953,752	1,497,245
Seeds	332,576	189,753	522,329
Trucks and autos	70,071	137,687	207,758
Other unallocated expenses	232,664	126,123	358,787

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

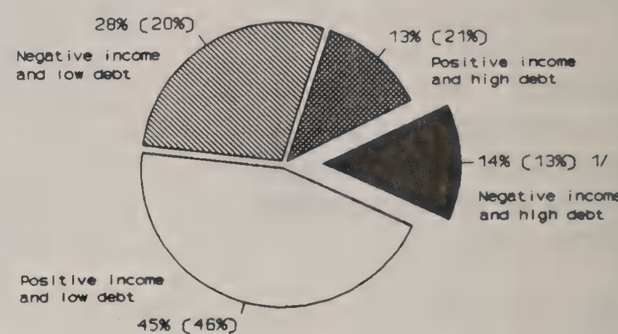
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: MINNESOTA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

FINANCIAL DIFFICULTIES CONTINUED FOR MINNESOTA FARMS DURING 1987, according to a survey conducted by the Minnesota Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-five percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 14 percent experienced financial difficulties. An additional 13 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 46 percent of Minnesota farms were in the most favorable financial situation, while 13 percent were classified in the weakest position.

Figure 1--Distribution of Minnesota farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Michigan	34	8	50	8
Wisconsin	56	16	22	6
Lake States	47	12	31	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	MI	MN	WI	Lake States	U.S.
			Acres per farm		
Acres operated 1/	240	280	230	250	450
			Dollars per farm		
Crop sales	26,800	20,900	7,500	17,600	28,900
+ Livestock sales	40,000 2/	31,400	55,900	41,900 2/	29,500
+ Other farm income	9,100	13,200	7,300	10,200	11,800
= Gross cash farm income	75,900 2/	65,500	70,700	69,700 2/	70,200
- Cash operating expenses	58,000	49,900	50,900	52,100	53,300
= Net cash farm income	17,900 2/	15,600	19,800	17,600 2/	16,900
Nonfarm income	27,400	20,400	15,900	20,400	24,900
Net worth	236,500	195,900	243,100	221,700	296,800
			Ratio		
Debt/asset ratio	0.21	0.24	0.20	0.22	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others. 2/ Estimates were revised.

Over 40 percent of Minnesota farm operators had negative net cash income in 1987 and about two-thirds of those with negative income had a relatively low debt level. Twenty-seven percent of Minnesota farmers had high debt levels, above the 15 percent national average. The average debt/asset ratio of 0.24 was an improvement over Minnesota's value of 0.34 a year earlier. Nonfarm income averaged $20,400 in 1987.

The average farm size in Minnesota was 280 acres, two-thirds of which were owned by the operator. On average, farmers with positive net incomes owned and operated more acreage than did farmers with negative incomes. Operators with high debt, regardless of income position, were generally younger than the operators of other farms. The ratio of expenses to gross income was higher for the positive income, high debt group (0.72) than for the positive income, low debt group (0.61). The ratio of interest expense to gross income for farms with high debt, but positive income was 0.15, indicating that 15 percent of their gross income paid interest expenses for borrowed capital. Farms in the most favorable financial position had the lowest ratio of interest to gross income (0.05) and those in the weakest financial position had the highest (0.23).

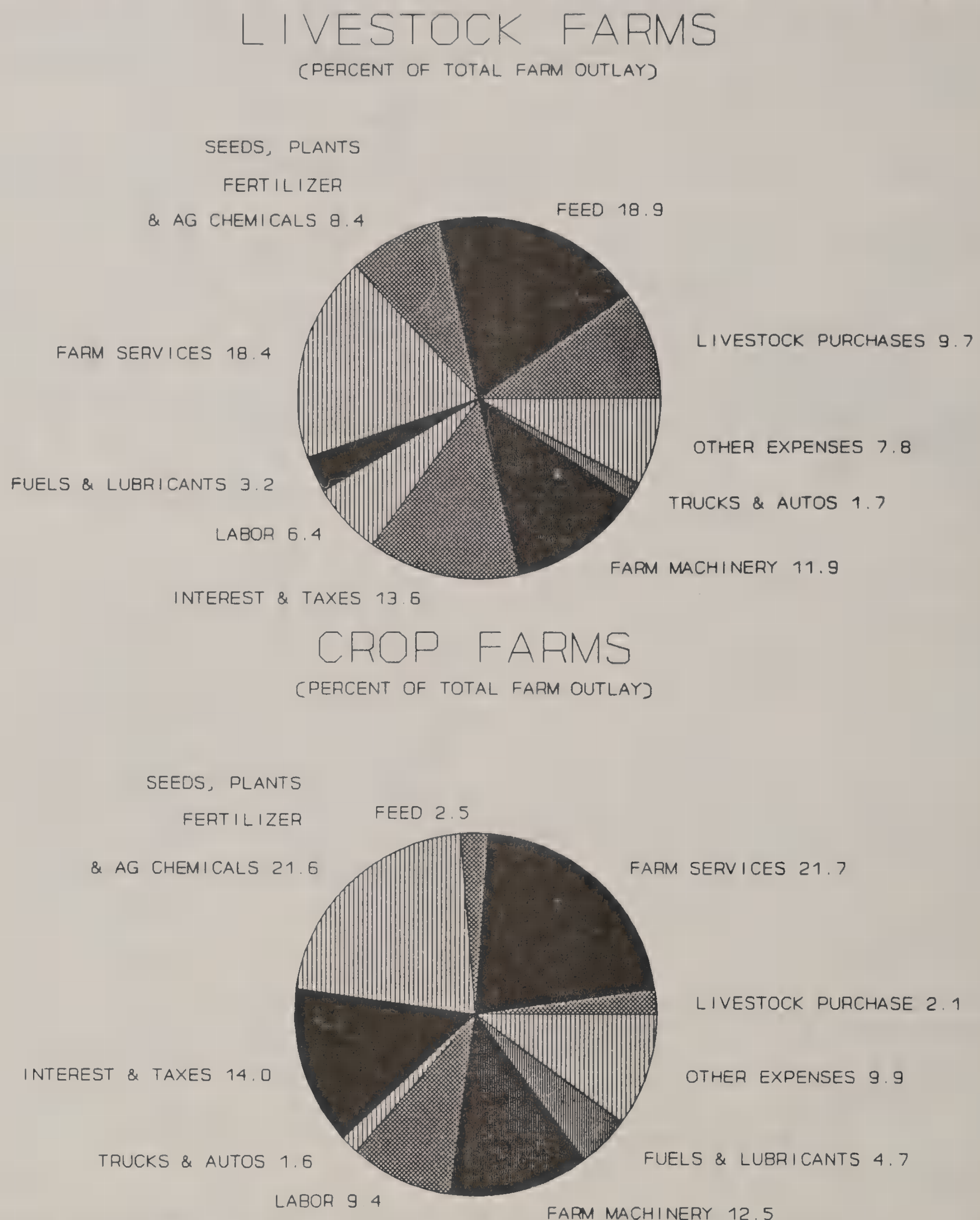
Table 2--Average operating and financial characteristics of Minnesota farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	45	13	28	14	100
Economic class:					
$40,000 or more	56	27	9	8	100
Less than $40,000	38	3	41	18	100
Type of farm:					
Cash grain	51	10	22	17	100
All crops	52	8	22	18	100
Dairy	48	33	12	7	100
All livestock or poultry	40	17	33	10	100
Operating:			Acres per farm		
Acres owned	240	230	120	110	190
Acres operated	340	390	190	180	280
			Years		
Operator age	52	41	49	40	48
			Dollars per farm		
Financial:					
Crop sales	33,000	26,800	5,700	5,900	20,900
Livestock sales	34,600	75,700	8,400	26,400	31,400
Other farm income	17,300	21,700	4,900	8,800	13,200
Gross cash farm income	84,900	124,300	19,000	41,100	65,500
Cash operating expenses	51,700	90,100	27,800	51,300	49,900
Net cash farm income	33,200	34,200	-8,800	-10,200	15,600
Nonfarm income	16,600	8,400	28,900	26,400	20,400
Total assets	334,300	316,900	167,400	142,000	259,000
Total debt	37,100	206,300	22,900	96,200	63,100
			Ratio		
Ratios:					
Debt/asset	0.11	0.65	0.14	0.68	0.24
Cash expenses/gross income	.61	.72	1.47	1.25	.76
Interest/gross income	.05	.15	.17	.23	.10

Minnesota farms in the larger economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position (56 percent), than farms in the smaller economic class (38 percent). Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Forty-one percent of operators in this smaller economic class had negative incomes but low debt.

Comparing all crop and livestock operations indicates that a larger proportion of crop farms were in the strongest financial position, but also that a greater percentage had negative incomes and high debt. Farms that specialized in the production of dairy products were in a better overall financial position than all livestock farms in 1987.

Figure 2--Lake States Farm Production Expenditures by Farm Type



Farm production expenditures in the Lake States totaled $12.4 billion in 1987, up 6.7 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Lake States included the following States: MI, MN, and WI. Lower regional expenditures in farm services, fertilizer, interest, fuels, and farm supplies were more than offset by increases in the remaining major expenses. Expenditures by livestock farms at $8.0 billion were 65 percent of the total regional expenses. Major expense items on livestock farms were feed (19 percent); farm services (18 percent); and interest and taxes (14 percent). Crop farm expenditures totaled $4.4 billion, 35 percent of the regional expenses. Nearly one-half of the crop farm expenses were for farm services and seed, plants, fertilizer and chemicals (22 percent, respectively).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Lake States

Lake States (MI, MN AND WI)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,358,617	8,022,143	12,380,760
Livestock and poultry	90,405	779,526	869,931
Feed	109,131	1,512,086	1,621,217
Farm services	946,460	1,477,164	2,423,624
Ag. chemicals and sprays	256,606	166,743	423,349
Fertilizer	352,312	314,983	667,295
Interest	423,572	782,349	1,205,921
Taxes (property and real estate)	188,140	307,347	495,487
Labor	409,734	515,971	925,705
Fuels and lubricants	205,455	259,113	464,568
Farm supplies (other)	88,886	142,868	231,754
Building and fencing (other)	82,223	286,199	368,422
Farm and land improvements (other)	26,890	70,479	97,369
Total farm machinery	543,493	953,752	1,497,245
Seeds	332,576	189,753	522,329
Trucks and autos	70,071	137,687	207,758
Other unallocated expenses	232,664	126,123	358,787

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

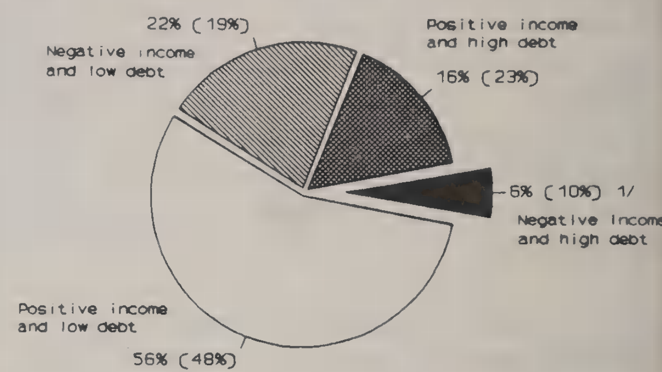
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: WISCONSIN

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF WISCONSIN FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Wisconsin Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-six percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 6 percent experienced financial difficulties. An additional 16 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 48 percent of Wisconsin farms were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Wisconsin farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Michigan	34	■	50	8
Minnesota	45	13	28	14
Lake States	47	12	31	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	MI	MN	WI	Lake States	U.S.
			Acres per farm		
Acres operated 1/	240	280	230	250	450
			Dollars per farm		
Crop sales	26,800	20,900	7,500	17,600	28,900
+ Livestock sales	40,000 2/	31,400	55,900	41,900 2/	29,500
+ Other farm income	9,100	13,200	7,300	10,200	11,800
= Gross cash farm income	75,900 2/	65,500	70,700	69,700 2/	70,200
- Cash operating expenses	58,000	49,900	50,900	52,100	53,300
= Net cash farm income	17,900 2/	15,600	19,800	17,600 2/	16,900
Nonfarm income	27,400	20,400	15,900	20,400	24,900
Net worth	236,500	195,900	243,100	221,700	296,800
			Ratio		
Debt/asset ratio	0.21	0.24	0.20	0.22	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others. 2/ Estimates were revised.

More than one-fourth of farm operators had a negative net cash income in 1987, and nearly 80 percent of those with negative incomes had a relatively low debt level. Twenty-two percent of farms had debt/asset ratios above 0.40, down from 33 percent in 1986. The average debt/asset ratio also fell from 0.31 to the current figure of 0.20. Wisconsin was the only State in the region that had higher cash farm earnings than nonfarm.

The average farm size in Wisconsin was 230 acres, 74 percent of which were owned by the operator. On average, farmers with positive net incomes owned and operated more acreage than did farmers with negative incomes. Farm operators with high debt, regardless of income position, averaged at least 10 years less in age than the operators of other farms. The ratio of expenses to gross income was higher for the positive income, high debt group (0.72) than for the positive income, low debt group (0.64). The ratio of interest expense to gross income for positive income, high debt farms was 0.15, indicating that 15 percent of their gross income paid interest expenses for borrowed capital. Farms in the most favorable financial position had the lowest ratio of interest to gross cash income (0.04) and those in the weakest financial position had the highest (0.38).

Table 2--Average operating and financial characteristics of Wisconsin farms by net cash farm income and debt/asset ratio position

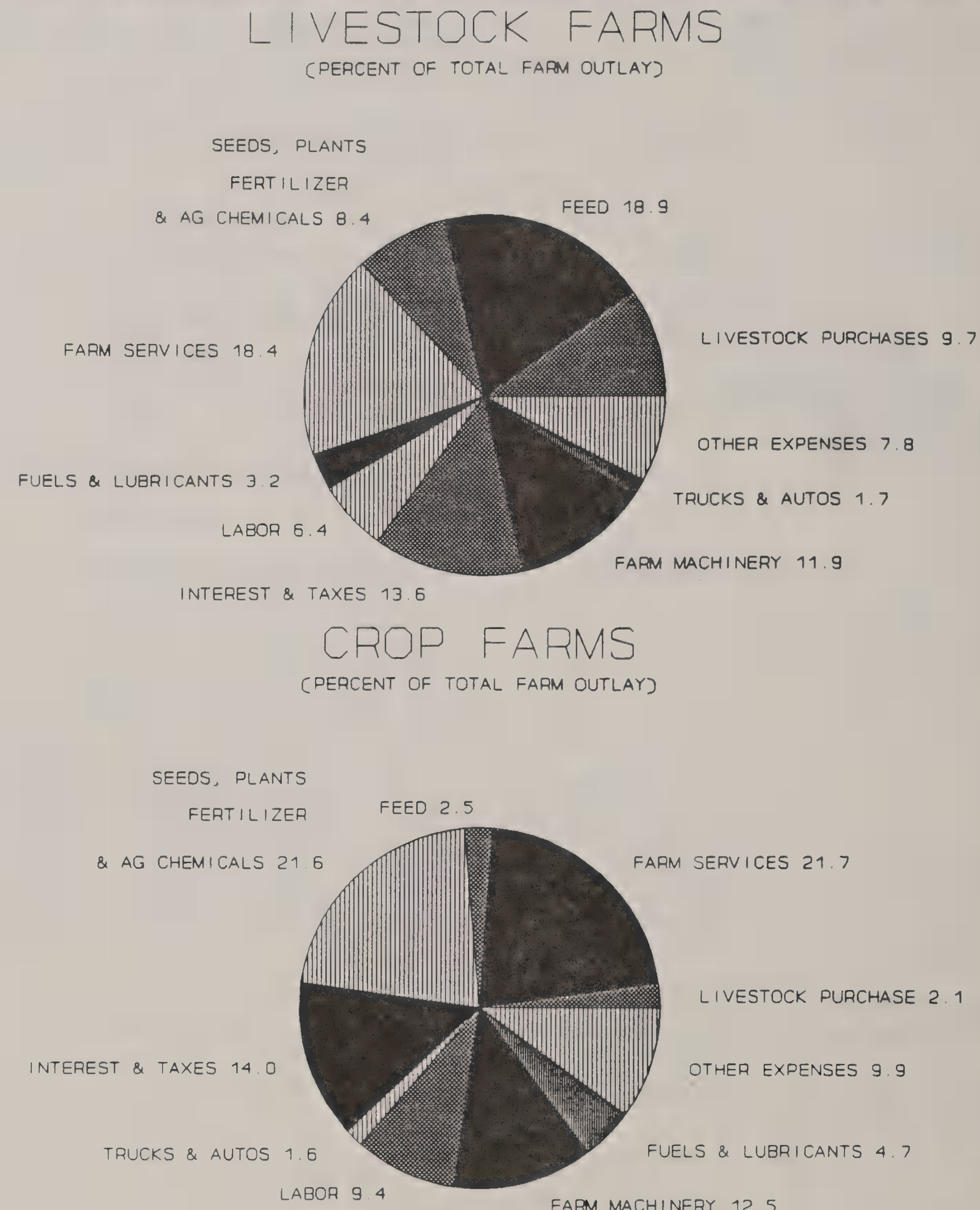
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	56	16	22	6	100
Economic class:					
$40,000 or more	67	26	4	3	100
Less than $40,000	45	4	43	8	100
Type of farm:					
Cash grain	37	10	53	0	100
All crops	48	d	44	d	100
Dairy	65	24	6	5	100
All livestock or poultry	60	19	15	6	100
Operating:			Acres per farm		
Acres owned	190	190	120	100	170
Acres operated	260	280	140	160	230
			Years		
Operator age	51	41	51	38	49
			Dollars per farm		
Financial:					
Crop sales	10,400	5,000	2,500	3,800	7,500
Livestock sales	65,000	100,300	8,800	22,700	55,900
Other farm income	7,700	13,900	2,000	4,800	7,300
Gross cash farm income	83,100	119,200	13,300	31,300	70,700
Cash operating expenses	52,800	86,300	22,400	44,000	50,900
Net cash farm income	30,300	32,900	-9,100	-12,600	19,800
Nonfarm income	11,700	9,900	28,000	27,900	15,900
Total assets	352,600	316,600	203,800	183,700	305,200
Total debt	34,900	200,100	18,900	124,600	62,100
			Ratio		
Ratios:					
Debt/asset	0.10	0.63	0.09	0.68	0.20
Cash expenses/gross income	.64	.72	1.68	1.40	.72
Interest/gross income	.04	.15	.18	.38	.08

d = Insufficient data for disclosure.

Wisconsin farms in the larger economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position (67 percent), than farms in the smaller economic class (45 percent). Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Forty-three percent of operators in this smaller economic class had negative incomes but low debt.

Comparing crop and livestock farms, indicates that a larger percentage of livestock farms were in the strongest financial position. Although none of the farms that specialized in the production of cash grains were categorized in the weakest financial position, there was a lower percentage in the most favorable financial position when compared with all crop farms. The overall financial position of dairy producers was stronger than for all livestock farms in 1987.

Figure 2--Lake States Farm Production Expenditures by Farm Type



Farm production expenditures in the Lake States totaled $12.4 billion in 1987, up 6.7 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Lake States included the following States: MI, MN, and WI. Lower regional expenditures in farm services, fertilizer, interest, fuels, and farm supplies were more than offset by increases in the remaining major expenses. Expenditures by livestock farms at $8.0 billion were 65 percent of the total regional expenses. Major expense items on livestock farms were feed (19 percent); farm services (18 percent); and interest and taxes (14 percent). Crop farm expenditures totaled $4.4 billion, 35 percent of the regional expenses. Nearly one-half of the crop farm expenses were for farm services and seed, plants, fertilizer and chemicals (22 percent, respectively).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Lake States

Lake States (MI, MN AND WI)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,358,617	8,022,143	12,380,760
Livestock and poultry	90,405	779,526	869,931
Feed	109,131	1,512,086	1,621,217
Farm services	946,460	1,477,164	2,423,624
Ag. chemicals and sprays	256,606	166,743	423,349
Fertilizer	352,312	314,983	667,295
Interest	423,572	782,349	1,205,921
Taxes (property and real estate)	188,140	307,347	495,487
Labor	409,734	515,971	925,705
Fuels and lubricants	205,455	259,113	464,568
Farm supplies (other)	88,886	142,868	231,754
Building and fencing (other)	82,223	286,199	368,422
Farm and land improvements (other)	26,890	70,479	97,369
Total farm machinery	543,493	953,752	1,497,245
Seeds	332,576	189,753	522,329
Trucks and autos	70,071	137,687	207,758
Other unallocated expenses	232,664	126,123	358,787

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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CORN BELT

The Corn Belt represented 21 percent of all U.S. farms in 1987. The distribution of farms was equally divided between crop and livestock enterprises. Ninety percent of crop farms specialized in the production of cash grains, while beef, hog, and sheep producers accounted for a similar share of all livestock production specialties. The most common farm size, in term of gross sales, was the less than $10,000 category (32 percent), and the $40,000-$100,000 group (19 percent). Ninety-one percent of farm were organized as individual operations, 3 percent as corporations, and 6 percent as partnerships. Sixty percent of farms operated less than 250 acres, while only 6 percent farmed at least 1,000 acres. Almost half of all farm operators owned all the land they operated in 1987. Full tenants represented 13 percent of all farms and the remaining 39 percent were partial owners of total land operated.

Sixty-five percent of total land operated in the Corn Belt was devoted to crop acreage, 15 percent to pasture, 12 percent was idle under government programs, and the remainder went for summer fallow, woodland, or some other use. Farm operators in the Corn Belt accounted for 20 percent of U.S. livestock sales and 22 percent of crop sales. Corn and soybeans accounted for over 80 percent of total crop sales in the Corn Belt. The highest ranking livestock and poultry products in terms of gross sales were hogs (36 percent) and cattle (35 percent). More than half of farm operators participated in Government programs, accounting for 34 percent of total payments. The typical farm operators was 52 years old and averaged working 34 hours per week on the farm. Two-thirds considered farming to be their primary occupation. Over 90 percent reported nonfarm earnings which represented 19 percent of all U.S. farm operator household off-farm income.

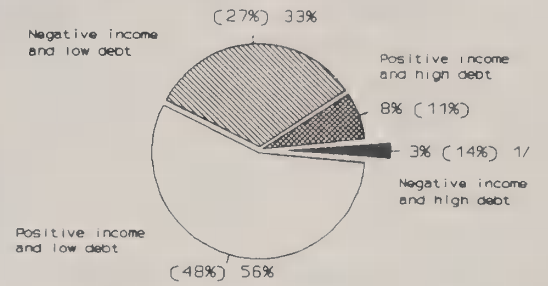
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: INDIANA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

INDIANA FARM OPERATORS REPORTED OVER $6.60 IN ASSETS FOR EACH DOLLAR OF DEBT, WHICH RESULTED IN ONE OF THE LOWEST AVERAGE DEBT/ASSET RATIOS IN THE CORN BELT REGION IN 1987, according to a survey conducted by the Indiana Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farms (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-six percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. However, 3 percent were in the weakest position. An additional 8 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. The survey taken a year ago indicated that 48 percent of Indiana farms were in the most favorable financial position, but that 14 percent were in the weakest category.

Figure 1--Distribution of Indiana farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Illinois	61	9	23	6
Iowa	57	24	14	5
Missouri	56	7	29	8
Ohio	51	6	35	8
Corn Belt	56	11	26	6
U S	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	IL	IN	IA	MO	OH	Corn Belt	U.S.
				Acres per farm			
Acres operated 1/	360	310	340	330	210	310	450
				Dollars per farm			
Crop sales	40,200	40,300	38,800	14,700	18,400	30,000	28,900
+ Livestock sales	29,700	25,700	42,700	18,700	21,300	28,000	29,500
+ Other farm income	16,200	13,600	26,300	5,400	6,700	13,900	11,800
= Gross cash farm income	86,100	79,600	107,800	38,800	46,400	71,900	70,200
- Total operating expenses	61,700	57,900	69,100	27,900	37,500	50,600	53,300
= Net cash farm income	24,400	21,700	38,600	10,900	8,800	21,300	16,900
Nonfarm income	26,000	25,900	16,200	18,900	26,000	22,100	24,900
Net worth	275,000	295,200	235,000	219,900	231,300	248,300	296,800
				Ratio			
Debt/asset ratio	0.18	0.15	0.27	0.14	0.15	0.18	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

More than one-third of Indiana farms had negative net cash income in 1987, but more than 90 percent of these farms had relatively low debt levels. Average nonfarm income on Indiana farms was greater than average net cash earnings from farming. Only 11 percent of Indiana farms had high debt levels which was below the percentage for either the Corn Belt or the U.S. Indiana had the highest average net woth in the region.

The average farm size in Indiana was 310 acres, 45 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farms with positive incomes were the largest in terms of acreage operated. These farms owned about 21 percent of acres operated. Generally, high debt operators were younger than operators with low debt/asset ratios. Average gross cash farm income for all farm operators was $79,600 and average net cash income was $21,700.

Table 2--Average operating and financial characteristics of Indiana farms by net cash income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	56	8	33	3	100
Economic class:					
$40,000 or more	63	17	16	4	100
Less than $40,000	51	2	43	3	100
Type of farm:					
Cash grain	67	9	23	1	100
All crops	67	8	22	3	100
Beef, hog, or sheep	40	d	48	d	100
All livestock and poultry	40	d	48	d	100
			Acres per farm		
Operating:					
Acres owned	180	110	80	80	140
Acres operated	350	530	180	280	310
			Years		
Operator age	56	40	54	40	53
			Dollars per farm		
Financial:					
Crop sales	50,300	124,300	6,300	d	40,300
Livestock sales	23,400	53,600	12,800	d	25,700
Other farm income	15,400	38,500	4,700	14,800	13,600
Gross cash farm income	89,100	216,400	23,800	162,900	79,600
Cash operating expenses	56,700	124,600	31,000	193,600	57,900
Net cash farm income	32,400	91,900	-7,200	d	21,700
Nonfarm income	21,400	24,000	33,900	25,000	25,900
Total assets	446,300	394,000	189,500	172,600	347,700
Total debt	39,300	236,100	22,500	154,100	52,600
			Ratio		
Ratios:					
Debt/asset	0.09	0.60	0.12	0.89	0.15
Cash expenses/gross income	.64	.58	1.30	1.19	.73
Interest/gross income	.05	.09	.11	.09	.07

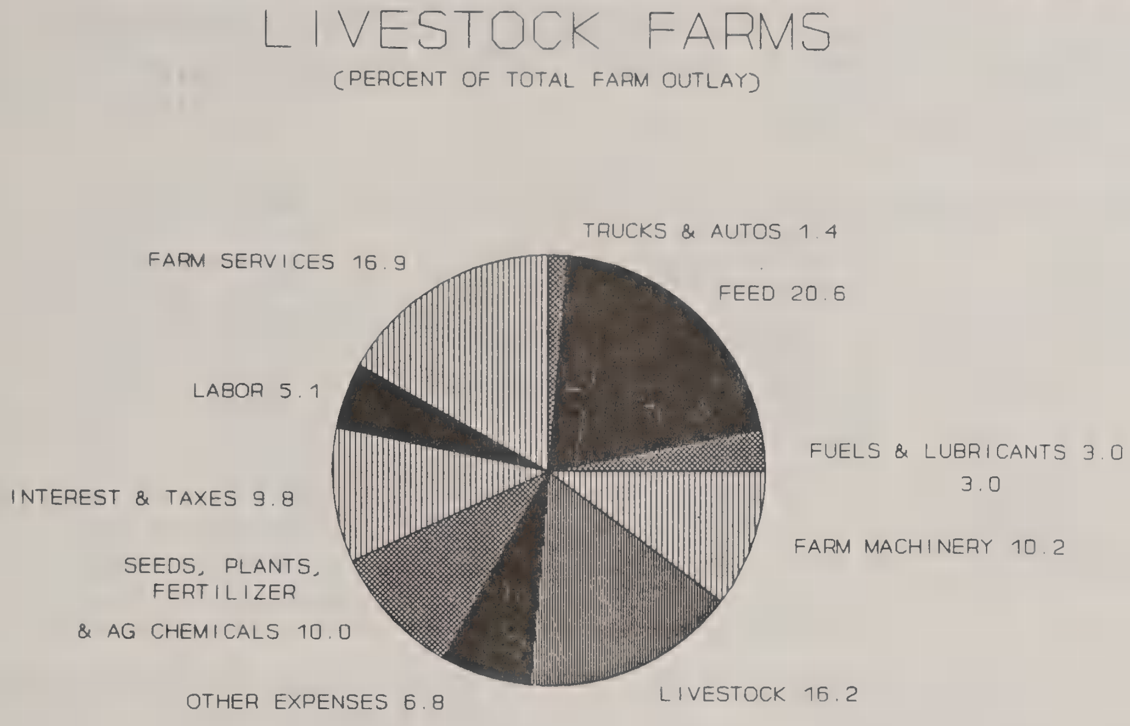
d = Insufficient data for disclosure.

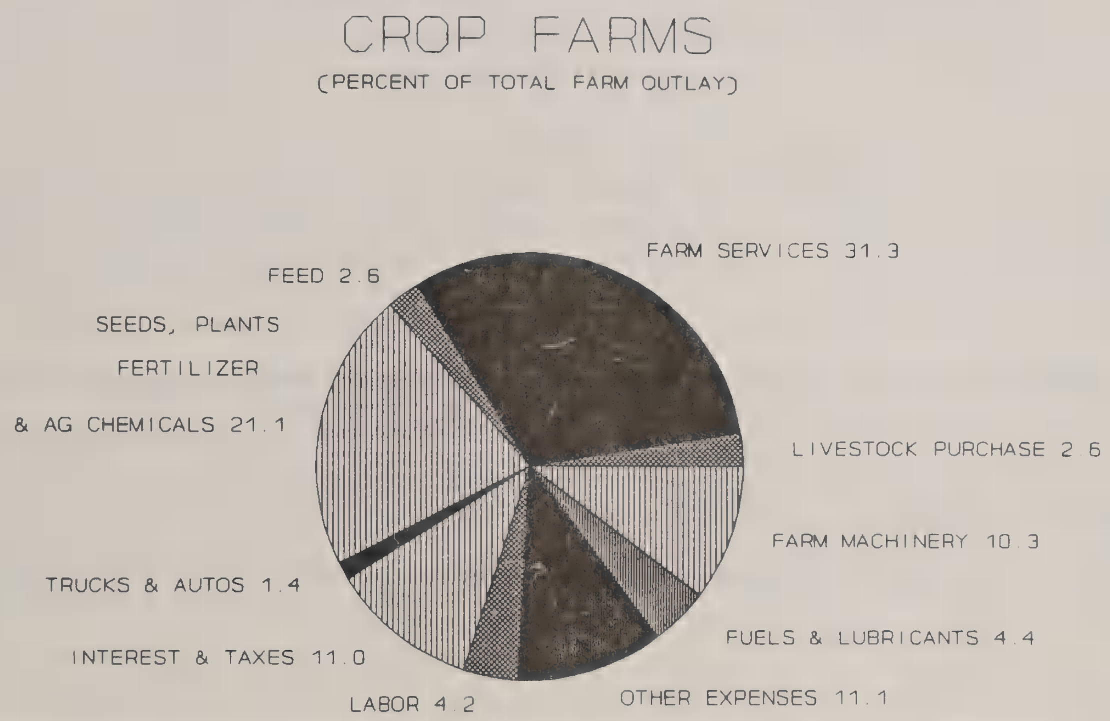
The ratio of expenses to gross income was lower for the positive income, high debt group (0.58), compared with the positive income, low debt group (0.64). Farms with relatively low debt and negative net income had the lowest gross farm income and the highest nonfarm income of any group. Those with high debt levels had higher gross incomes than farms with low debt levels. About one-fourth of the high debt level farms had negative net cash incomes largely because of interest expense.

Indiana farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 63 percent, than farms in the smaller economic class, 51 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had a larger proportion of operations with positive incomes and low debt when compared to operations that specialized in livestock production. The financial position of cash grain farms was representative of all crop farms as were beef, hog, and sheep producers for livestock farms.

Figure 2--Corn Belt Farm Production Expenditures by Farm Type





Farm production expenditures in the Corn Belt totaled $25.7 billion in 1987, up 7.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Corn Belt region included the following States: IL, IN, IA, MO, and OH. Reduced outlays for livestock and poultry purchases, feed, interest, fuels and lubricants, and building and fencing were offset by increases in all other major regional expense items. Expenditures for crop farms at $15.0 billion were 58 percent of the total regional expenses. Major expense items on crop farms were farm services (31 percent) and seeds, plants, fertilizer and chemicals (21 percent). Over one-half of the livestock farm expenses were for feed (21 percent), farm services (17 percent), and livestock purchases (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Corn Belt

Corn Belt (IL, IN, IA, MO, AND OH)	Crop Farms	Livestock Farms	Region Total
		1,000 Dollars	
Total farm production Expenditures	14,955,768	10,769,094	25,724,862
Livestock and poultry	394,448	1,742,669	2,137,117
Feed	387,677	2,214,132	2,601,809
Farm Services	4,671,671	1,816,593	6,488,264
Ag chemicals and sprays	833,179	247,109	1,080,288
Fertilizer	1,500,134	576,551	2,076,685
Interest	1,247,682	814,030	2,061,712
Taxes (property and real estate)	398,100	246,349	644,449
Labor	633,294	546,126	1,179,420
Fuels and lubricants	659,736	322,731	982,467
Farm supplies	120,749	120,799	241,548
Building and fencing	159,394	271,549	430,943
Farm and land improvements	95,762	51,097	146,859
Total farm machinery	1,540,116	1,103,092	2,643,208
Seeds and plants	817,876	252,364	1,070,240
Trucks and autos	208,752	151,516	360,268
Other unallocated expenses	1,287,201	292,316	1,579,517

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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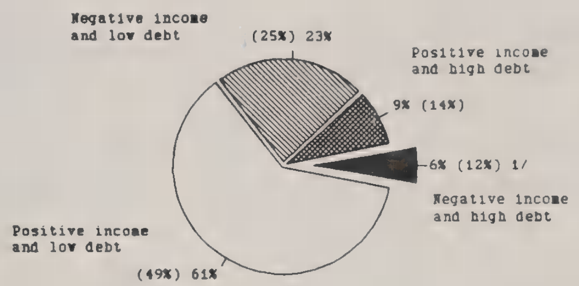
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: ILLINOIS

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF ILLINOIS FARMS WAS AMONG THE BEST IN THE CORN BELT AT THE BEGINNING OF 1988, according to a survey conducted by the Illinois Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 60 percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 6 percent experienced financial difficulties. An additional 9 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. The survey taken a year ago showed 49 percent of farms in the strongest financial position and that 12 percent were in the weakest category having negative incomes and high levels of debt.

Figure 1--Distribution of Illinois farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Indiana	56	8	33	3
Iowa	57	24	14	5
Missouri	56	7	29	8
Ohio	51	6	35	8
Corn Belt	56	11	26	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	IL	IN	IA	MO	OH	Corn Belt	U.S.
				Acres per farm			
Acres operated 1/	360	310	340	330	210	310	450
				Dollars per farm			
Crop sales	40,200	40,300	38,800	14,700	18,400	30,000	28,900
+ Livestock sales	29,700	25,700	42,700	18,700	21,300	28,000	29,500
+ Other farm income	16,200	13,600	26,300	5,400	6,700	13,900	11,800
= Gross cash farm income	86,100	79,600	107,800	38,800	46,400	71,900	70,200
- Total operating expenses	61,700	57,900	69,100	27,900	37,500	50,600	53,300
= Net cash farm income	24,400	21,700	38,600	10,900	8,800	21,300	16,900
Nonfarm income	26,000	25,900	16,200	18,900	26,000	22,100	24,900
Net worth	275,000	295,200	235,000	219,900	231,300	248,300	296,800
				Ratio			
Debt/asset ratio	0.18	0.15	0.27	0.14	0.15	0.18	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Illinois was one of two Corn Belt States with fewer than one-third of farms with negative net cash farm incomes in 1987. Like other States in the region, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for Illinois was over $1,000 higher than for all U.S. farm households and was among the highest in the region. The average debt/asset ratio was the second highest in the region.

The average farm size in Illinois was 360 acres, 39 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned only 27 percent of acres operated. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. The average gross cash farm income for all farm operators was $86,100 and average net cash income was $24,400 in Illinois in 1987.

Table 2--Average operating and financial characteristics of Illinois farms by net cash income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	61	9	23	6	100
Economic class:					
$40,000 or more	70	14	11	5	100
Less than $40,000	53	4	37	6	100
Type of farm:					
Cash grain	67	11	16	7	100
All crops	65	10	17	8	100
Beef, hog, or sheep	53	7	38	2	100
All livestock or poultry	53	6	37	4	100
Operating:			Acres per farm		
Acres owed	152	180	90	100	140
Acres operated	396	540	190	370	360
			Years		
Operator age	51	43	53	43	50
Financial:			Dollars per farm		
Crop sales	49,100	73,200	8,500	22,500	40,200
Livestock sales	37,200	45,200	6,300	21,200	29,700
Other farm income	17,300	33,700	6,900	15,400	16,200
Gross cash farm income	103,600	152,200	21,700	59,200	86,100
Cash operating expenses	65,500	110,800	29,100	75,500	61,700
Net cash farm income	38,100	41,400	-7,400	-16,300	24,400
Nonfarm income	29,700	20,100	21,400	14,900	26,000
Total assets	379,800	399,600	215,600	266,000	336,200
Total debt	37,100	241,600	26,600	165,200	61,200
Ratios:			Ratio		
Debt/asset	0.10	0.60	0.12	0.62	0.18
Cash expenses/gross income	.63	.73	1.34	1.28	.72
Interest/gross income	.04	.15	.14	.33	.08

The ratio of expenses to gross income was higher for the positive income, high debt group (0.73), compared with the positive income, low debt group (0.63). Farms in the most favorable financial position also had the highest nonfarm income. Those with high debt levels had higher gross incomes than farms with low debt levels. About two-fifths of the high debt level farms had negative net cash incomes largely because of interest expense. The ratio of interest expense to gross income for this group was 0.33, indicating that fully one-third of their gross income paid interest expenses for borrowed capital. The remaining 60 percent of high debt farms earned the highest net cash income, a result of the largest level of gross earnings and the second smallest ratio of operating expenses to gross income.

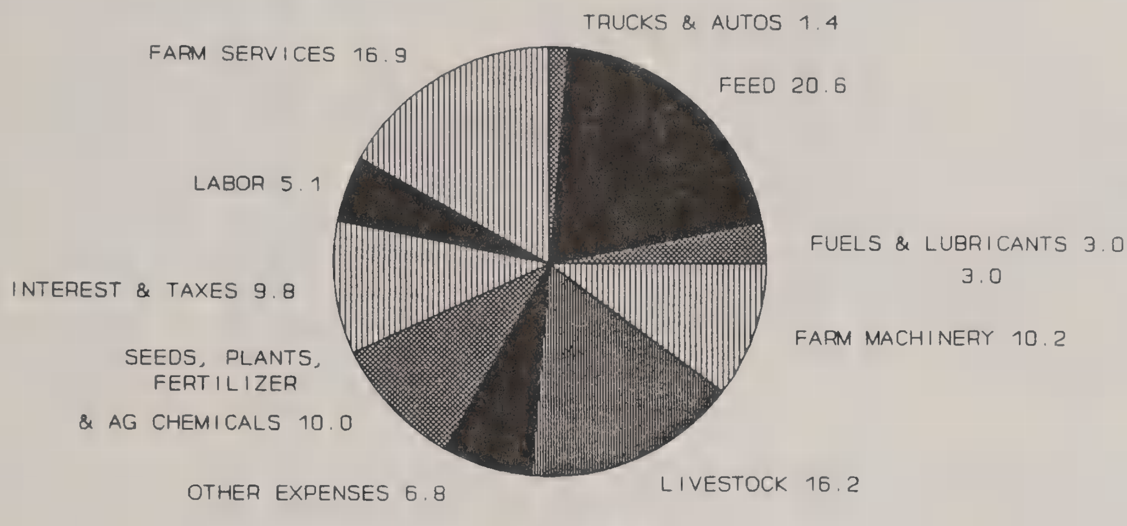
Illinois farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 70 percent, than farms in the smaller economic class, 53 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Farms that specialized in the production of cash grains had the largest proportion of farms which were in the most financially favorable position. Although beef, hog, and sheep operations had relatively low debt levels, many of them had negative farm incomes in 1987; 38 percent had low debt and negative farm incomes. Livestock farms had a smaller percentage of farms with both positive incomes and low debt levels and negative incomes and high debt than either cash grain farms or all crop farms as a group.

Figure 2--Corn Belt Farm Production Expenditures by Farm Type

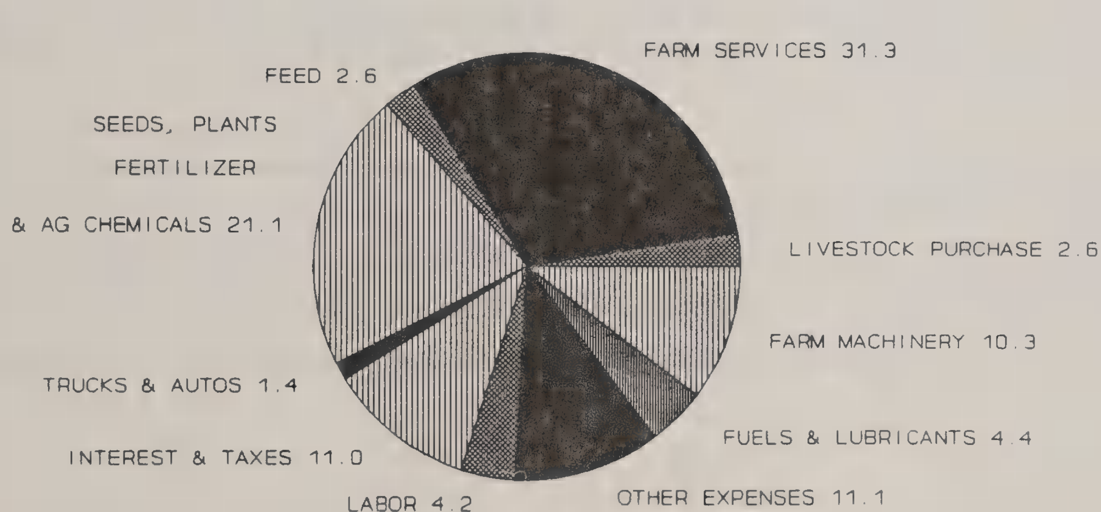
LIVESTOCK FARMS

(PERCENT OF TOTAL FARM OUTLAY)



CROP FARMS

(PERCENT OF TOTAL FARM OUTLAY)



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Fertilizer	1,500,134	576,551	2,076,685
Interest	1,247,682	814,030	2,061,712
Taxes (property and real estate)	398,100	246,349	644,449
Labor	633,294	546,126	1,179,420
Fuels and lubricants	659,736	322,731	982,467
Farm supplies	120,749	120,799	241,548
Building and fencing	159,394	271,549	430,943
Farm and land improvements	95,762	51,097	146,859
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Seeds and plants	817,876	252,364	1,070,240
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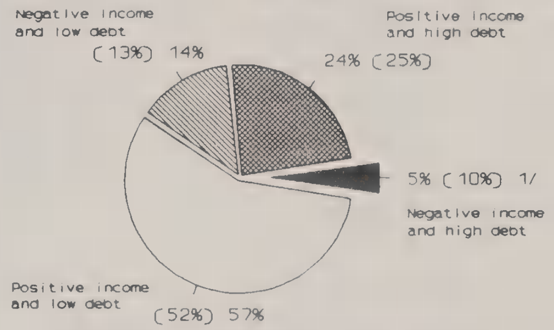
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: IOWA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

IOWA FARM OPERATORS, ON AVERAGE, HAD THE HIGHEST AMOUNT OF DEBT RELATIVE TO THE VALUE OF THEIR ASSETS OF ANY CORN BELT STATE AT THE BEGINNING OF 1988, according to a survey conducted by the Iowa Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-seven percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. However, 5 percent were in the weakest position. An additional 24 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. The survey taken a year ago indicated that 52 percent of Iowa farms were in the most favorable financial position, but that 10 percent were in the weakest category.

Figure 1--Distribution of Iowa farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Illinois	61	9	23	6
Indiana	56	8	33	3
Missouri	56	7	29	8
Ohio	51	6	35	8
Corn Belt	56	11	26	6
U S	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	IL	IN	IA	MO	OH	Corn Belt	U.S.
	Acres per farm						
Acres operated 1/	360	310	340	330	210	310	450
	Dollars per farm						
Crop sales	40,200	40,300	38,800	14,700	18,400	30,000	28,900
+ Livestock sales	29,700	25,700	42,700	18,700	21,300	28,000	29,500
+ Other farm income	16,200	13,600	26,300	5,400	6,700	13,900	11,800
= Gross cash farm income	86,100	79,600	107,800	38,800	46,400	71,900	70,200
- Total operating expenses	61,700	57,900	69,100	27,900	37,500	50,600	53,300
= Net cash farm income	24,400	21,700	38,600	10,900	8,800	21,300	16,900
Nonfarm income	26,000	25,900	16,200	18,900	26,000	22,100	24,900
Net worth	275,000	295,200	235,000	219,900	231,300	248,300	296,800
	Ratio						
Debt/asset ratio	0.18	0.15	0.27	0.14	0.15	0.18	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Average nonfarm income on Iowa farms was smaller than average net cash earnings from farming in 1987. Average nonfarm income for Iowa was nearly $9,000 less than for all U.S. farm households and was the lowest in the region. Twenty-nine percent of Iowa farms had high debt levels, which was substantially larger than the U.S. percentage. In addition, the average debt/asset ratio was the highest in the region.

The average farm size in Iowa was 340 acres, 50 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated about the same or more acreage than did farms with negative incomes. The largest farms were, however, those in the least favorable financial position. Operators of these farms, which averaged 440 acres, owned about 40 percent of acres operated. The average gross cash farm income of farm operators was $107,800 and average net cash income was $38,600. On average, high debt farms with positive incomes had the highest gross cash farm income and net cash farm income.

Table 2--Average operating and financial characteristics of Iowa farms by net farm income and debt/asset ratio position

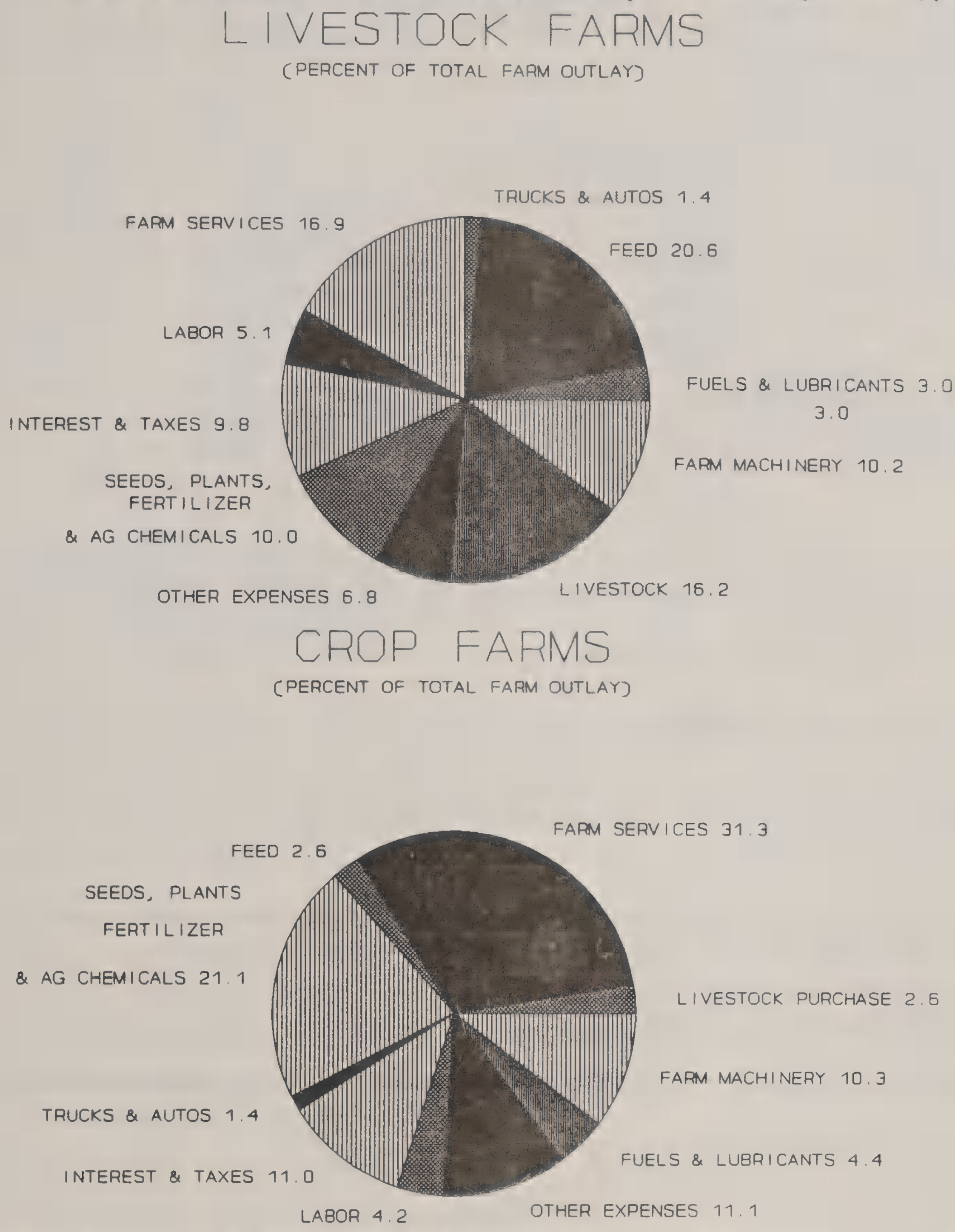
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	57	24	14	5	100
Economic class:					
$40,000 or more	60	29	7	4	100
Less than $40,000	52	16	26	6	100
Type of farm:					
Cash grain	60	27	9	4	100
All crops	60	27	9	4	100
Beef, hog, or sheep	49	24	22	5	100
All livestock and poultry	53	21	21	5	100
			Acres per farm		
Operating:					
Acres owned	190	180	120	180	170
Acres operated	330	400	220	440	340
			Years		
Operator age	53	44	51	42	50
			Dollars per farm		
Financial:					
Crop sales	40,900	53,400	7,600	29,600	38,800
Livestock sales	46,900	47,700	22,000	25,700	42,700
Other farm income	25,700	38,400	9,800	19,100	26,300
Gross cash farm income	113,600	139,500	39,400	74,400	107,800
Cash operating expenses	64,700	89,000	46,300	88,000	69,100
Net cash farm income	48,900	50,600	-6,900	-13,600	38,600
Nonfarm income	13,300	19,000	18,100	30,200	16,200
Total assets	367,200	297,800	209,400	274,300	324,000
Total debt	42,700	206,800	36,000	195,100	89,000
			Ratio		
Ratios:					
Debt/asset	0.12	0.69	0.17	0.71	0.27
Cash expenses/gross income	.57	.64	1.18	1.18	.64
Interest/gross income	.04	.13	.10	.31	.08

The ratio of expenses to gross income was higher for the positive income, high debt group (0.64), compared with the positive income, low debt group (0.57). About one-fifth of the high debt level farms had negative net cash incomes largely because of interest expense. The ratio of interest expense to gross income for this group was 0.31, indicating that fully one-third of their gross income paid interest expenses for borrowed capital.

Iowa farms in the largest economic classes ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 60 percent, than farms in the smaller economic class, 52 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

The financial performance of cash grain farms was similar to that of all farms that specialized in crop production. Beef, hog, and sheep farms had the same percentage of operators in the weakest financial position as all livestock farms had, but a larger percentage with positive incomes and low debt. A greater proportion of livestock farms had negative incomes (26 percent) when compared with crop farms (13 percent).

Figure 2--Corn Belt Farm Production Expenditures by Farm Type



Farm production expenditures in the Corn Belt totaled $25.7 billion in 1987, up 7.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Corn Belt region included the following States: IL, IN, IA, MO, and OH. Reduced outlays for livestock and poultry purchases, feed, interest, fuels and lubricants, and building and fencing were offset by increases in all other major regional expense items. Expenditures for crop farms at $15.0 billion were 58 percent of the total regional expenses. Major expense items on crop farms were farm services (31 percent) and seeds, plants, fertilizer and chemicals (21 percent). Over one-half of the livestock farm expenses were for feed (21 percent), farm services (17 percent), and livestock purchases (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Corn Belt

Corn Belt (IL, IN, IA, MO, AND OH)	Crop Farms	Livestock Farms	Region Total
		1,000 Dollars	
Total farm production Expenditures	14,955,768	10,769,094	25,724,862
Livestock and poultry	394,448	1,742,669	2,137,117
Feed	387,677	2,214,132	2,601,809
Farm Services	4,671,671	1,816,593	6,488,264
Ag chemicals and sprays	833,179	247,109	1,080,288
Fertilizer	1,500,134	576,551	2,076,685
Interest	1,247,682	814,030	2,061,712
Taxes (property and real estate)	398,100	246,349	644,449
Labor	633,294	546,126	1,179,420
Fuels and lubricants	659,736	322,731	982,467
Farm supplies	120,749	120,799	241,548
Building and fencing	159,394	271,549	430,943
Farm and land improvements	95,762	51,097	146,859
Total farm machinery	1,540,116	1,103,092	2,643,208
Seeds and plants	817,876	252,364	1,070,240
Trucks and autos	208,752	151,516	360,268
Other unallocated expenses	1,287,201	292,316	1,579,517

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

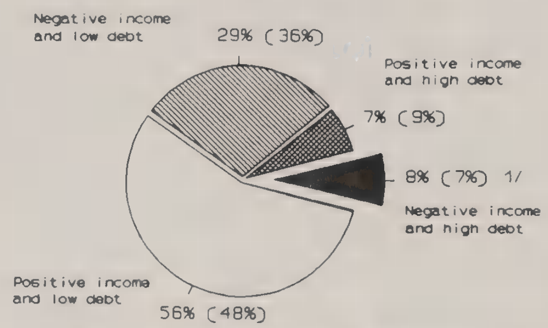
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: MISSOURI

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE SHARE OF MISSOURI FARMS WITH A RELATIVELY HIGH DEBT BURDEN REMAINED STABLE DURING 1987, according to a survey conducted by the Missouri Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-six percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. However, 8 percent were in the weakest position. This was a slightly higher proportion than for the Corn Belt and the U.S. An additional 7 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. The survey taken a year ago indicated that 48 percent of Missouri farms were in the most favorable financial position, but that 7 percent were in the weakest category.

Figure 1--Distribution of Missouri farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Illinois	61	9	23	6
Indiana	56	8	33	3
Iowa	57	24	14	5
Ohio	51	6	35	8
Corn Belt	56	11	26	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	IL	IN	IA	MO	OH	Corn Belt	U.S.
				Acres per farm			
Acres operated 1/	360	310	340	330	210	310	450
				Dollars per farm			
Crop sales	40,200	40,300	38,800	14,700	18,400	30,000	28,900
+ Livestock sales	29,700	25,700	42,700	18,700	21,300	28,000	29,500
+ Other farm income	16,200	13,600	26,300	5,400	6,700	13,900	11,800
= Gross cash farm income	86,100	79,600	107,800	38,800	46,400	71,900	70,200
- Total operating expenses	61,700	57,900	69,100	27,900	37,500	50,600	53,300
= Net cash farm income	24,400	21,700	38,600	10,900	8,800	21,300	16,900
Nonfarm income	26,000	25,900	16,200	18,900	26,000	22,100	24,900
Net worth	275,000	295,200	235,000	219,900	231,300	248,300	296,800
				Ratio			
Debt/asset ratio	0.18	0.15	0.27	0.14	0.15	0.18	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

More than one-third of Missouri farms had negative net cash income in 1987, but nearly 80 percent of these farms had relatively low debt levels. Average nonfarm income was greater than average net cash earnings from farming. Still, average nonfarm income for Missouri was $6,000 higher than for all U.S. farm households and was among the lowest in the region. The average debt/asset ratio of 0.14 was the lowest in the region.

The average farm size in Missouri was 330 acres, 67 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position were smallest farms in terms of acres owned and operated. These farms owned about 62 percent of acres operated. Generally, high debt operators, regardless of income position, were younger than the operators of farms with low debt levels.

Table 2--Average operating and financial characteristics for Missouri farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	56	7	29	8	100
Economic class:					
$40,000 or more	71	18	d	d	100
Less than $40,000	52	3	37	9	100
Type of farm:					
Cash grain	58	16	d	d	100
All crops	62	16	19	3	100
Beef, hog, or sheep	56	3	30	11	100
All livestock and poultry	55	4	32	9	100
			Acres per farm		
Operating:					
Acres owned	270	300	130	100	220
Acres operated	400	560	180	160	330
			Years		
Operator age	57	39	54	44	54
			Dollars per farm		
Financial:					
Crop sales	20,000	31,300	3,700	d	14,700
Livestock sales	23,000	42,700	7,200	10,000	18,700
Other farm income	6,400	14,400	1,700	d	5,400
Gross cash farm income	49,400	88,400	12,600	d	38,800
Cash operating expenses	29,200	57,900	18,100	28,700	27,900
Net cash farm income	20,100	30,500	-5,500	-11,100	10,900
Nonfarm income	15,200	11,000	22,900	37,300	18,900
Total assets	297,700	279,300	200,500	126,900	254,700
Total debt	21,100	180,400	16,300	75,200	34,800
			Ratio		
Ratios:					
Debt/asset	0.07	0.65	0.08	0.59	0.14
Cash expenses/gross income	.59	.65	1.44	1.63	.72
Interest/gross income	.05	.17	.12	.33	.09

d = Insufficient data for disclosure.

The ratio of expenses to gross income was higher for the positive income, high debt group (0.65), compared with the positive income, low debt group (0.59). Farms with high debt and negative net income had the highest nonfarm income of any group. Those farms with high debt levels had higher gross incomes than farms with low debt levels. The ratio of interest expense to gross income for farms in the weakest financial position was 0.33, indicating that one-third of their gross income paid interest expenses for borrowed capital. The high debt farms with positive incomes earned the highest net cash income, a result of the largest level of gross earnings and the second smallest ratio of operating expenses to gross income.

Missouri farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 71 percent, than farms in the smaller economic class, 52 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had the largest proportion of operations in the most financially favorable position and a substantially lower percentage of farms with negative incomes and high debt when compared to farms that specialized in livestock production.

Figure 2--Corn Belt Farm Production Expenditures by Farm Type

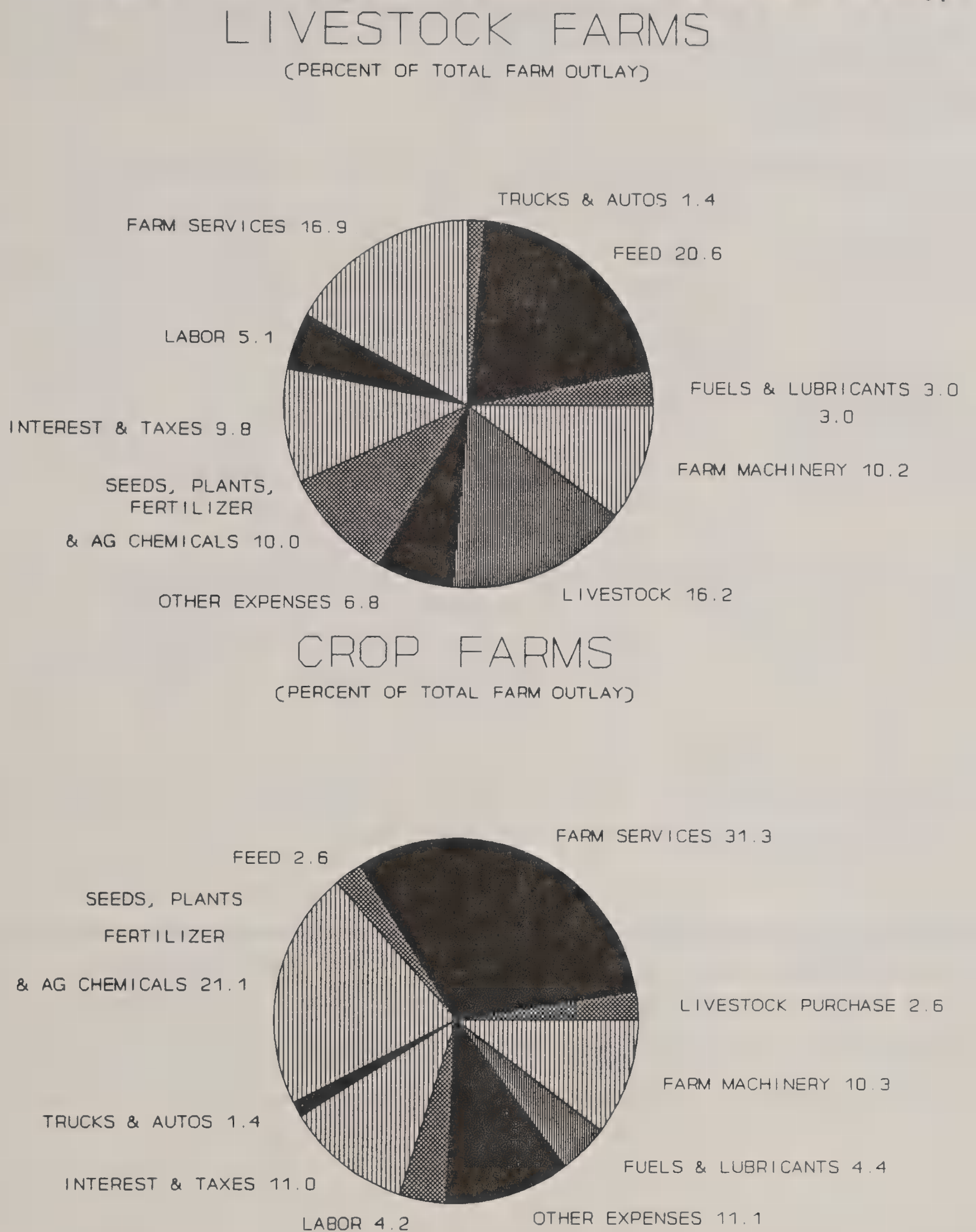


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Table 3--Selected production expenditures by type of farm, Corn Belt

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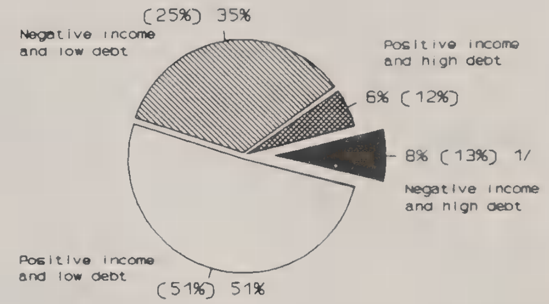
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: OHIO

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF OHIO FARMS IMPROVED SLIGHTLY DURING 1987, according to a survey conducted by the Ohio Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 50 percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 8 percent were in the weakest position. This was a slightly higher proportion than for the Corn Belt and the U.S. An additional 6 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 51 percent of Ohio farms were in the most favorable financial position, but that 13 percent were in the weakest category.

Figure 1--Distribution of Ohio farms by net cash farm income and debt/asset ratio position



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				Dollars per farm			
Crop sales	40,200	40,300	38,800	14,700	18,400	30,000	28,900
+ Livestock sales	29,700	25,700	42,700	18,700	21,300	28,000	29,500
+ Other farm income	16,200	13,600	26,300	5,400	6,700	13,900	11,800
= Gross cash farm income	86,100	79,600	107,800	38,800	46,400	71,900	70,200
- Total operating expenses	61,700	57,900	69,100	27,900	37,500	50,600	53,300
= Net cash farm income	24,400	21,700	38,600	10,900	8,800	21,300	16,900
Nonfarm income	26,000	25,900	16,200	18,900	26,000	22,100	24,900
Net worth	275,000	295,200	235,000	219,900	231,300	248,300	296,800
				Ratio			
Debt/asset ratio	0.18	0.15	0.27	0.14	0.15	0.18	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

More than two-fifths of Ohio farms had negative net cash incomes in 1987, but more than 80 percent of these farms had a relatively low debt level. Like most other States in the region, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for Ohio was over $1,000 higher than for all U.S. farm households and was among the highest in the region.

The average farm size in Ohio was 210 acres, 62 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. The average gross cash farm income for all farm operators was $46,400 and average net cash income was $8,800 in Ohio in 1987.

The ratio of expenses to gross income was higher for the positive income, high debt group (0.77), compared with the positive income, low debt group (0.68). Farms with relatively low debt and negative net income had the lowest gross farm income and the highest nonfarm income of any group. Nearly three-fifths of the high debt level farms had negative net cash incomes largely because of interest expense. The ratio of interest expense to gross income for high debt, negative income farms was 0.43, indicating that more than two-fifths of their gross income paid interest expenses for borrowed capital. The remaining 40 percent of high debt farms earned the highest net cash income, a result of the largest level of gross earnings and the second smallest ratio of operating expenses to gross income.

Table 2--Average operating and financial characteristics for Ohio farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	51	6	35	8	100
Economic class:					
$40,000 or more	65	18	d	d	100
Less than $40,000	45	2	42	10	100
Type of farm:					
Cash grain	54	10	32	4	100
All crops	49	8	34	9	100
Beef, hog, or sheep	50	d	41	d	100
All livestock and poultry	53	d	35	d	100
			Acres per farm		
Operating:					
Acres owned	150	140	110	90	130
Acres operated	240	450	160	120	210
			Years		
Operator age	57	41	52	41	53
			Dollars per farm		
Financial:					
Crop sales	23,500	58,600	6,200	d	18,400
Livestock sales	28,600	52,900	5,900	17,700	21,300
Other farm income	9,000	20,000	1,900	d	6,700
Gross cash farm income	61,100	131,500	14,000	27,500	46,400
Cash operating expenses	41,600	101,500	19,600	39,500	37,500
Net cash farm income	19,500	30,000	-5,600	-11,900	8,800
Nonfarm income	20,100	15,900	35,200	31,000	26,000
Total assets	319,200	327,800	221,400	150,700	271,900
Total debt	23,600	218,800	17,000	110,100	40,600
			Ratio		
Ratios:					
Debt/asset	0.07	0.67	0.08	0.73	0.15
Cash expenses/gross income	.68	.77	1.40	1.43	.81
Interest/gross income	.05	.13	.15	.43	.09

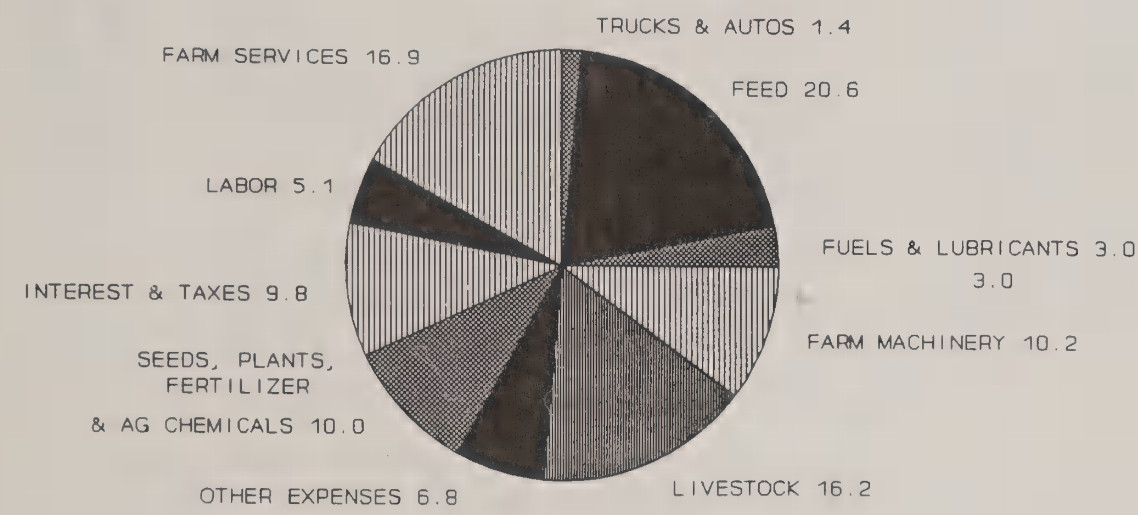
d = Insufficient data for disclosure.

Ohio farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 65 percent, than farms in the smaller economic class, 45 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Farms that specialized in the production of cash grains had the largest proportion of operations which were classified in the most financially favorable position. Overall, however, livestock operations had a larger share of farms in a favorable position than crop operations.

Figure 2--Corn Belt Farm Production Expenditures by Farm Type

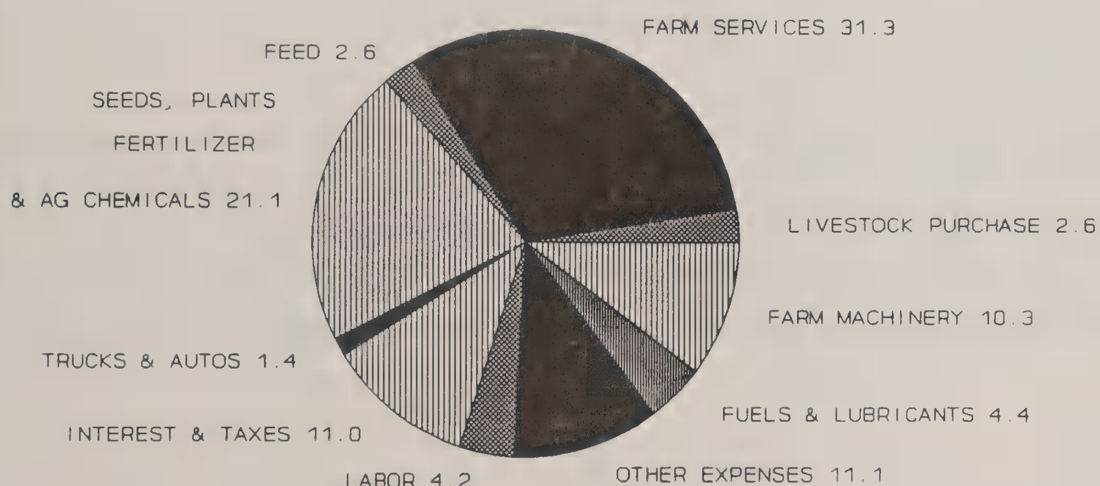
LIVESTOCK FARMS

(PERCENT OF TOTAL FARM OUTLAY)



CROP FARMS

(PERCENT OF TOTAL FARM OUTLAY)



Farm production expenditures in the Corn Belt totaled $25.7 billion in 1987, up 7.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Corn Belt region included the following States: IL, IN, IA, MO, and OH. Reduced outlays for livestock and poultry purchases, feed, interest, fuels and lubricants, and building and fencing were offset by increases in all other major regional expense items. Expenditures for crop farms at $15.0 billion were 58 percent of the total regional expenses. Major expense items on crop farms were farm services (31 percent) and seeds, plants, fertilizer and chemicals (21 percent). Over one-half of the livestock farm expenses were for feed (21 percent), farm services (17 percent), and livestock purchases (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Corn Belt

Corn Belt (IL, IN, IA, MO, AND OH)	Crop Farms	Livestock Farms	Region Total
		1,000 Dollars	
Total farm production Expenditures	14,955,768	10,769,094	25,724,862
Livestock and poultry	394,448	1,742,669	2,137,117
Feed	387,677	2,214,132	2,601,809
Farm Services	4,671,671	1,816,593	6,488,264
Ag chemicals and sprays	833,179	247,109	1,080,288
Fertilizer	1,500,134	576,551	2,076,685
Interest	1,247,682	814,030	2,061,712
Taxes (property and real estate)	398,100	246,349	644,449
Labor	633,294	546,126	1,179,420
Fuels and lubricants	659,736	322,731	982,467
Farm supplies	120,749	120,799	241,548
Building and fencing	159,394	271,549	430,943
Farm and land improvements	95,762	51,097	146,859
Total farm machinery	1,540,116	1,103,092	2,643,208
Seeds and plants	817,876	252,364	1,070,240
Trucks and autos	208,752	151,516	360,268
Other unallocated expenses	1,287,201	292,316	1,579,517

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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NORTHERN PLAINS

The Northern Plains was estimated to have 9 percent of all U.S. farms and ranches in 1987. Cash grain and beef, hog, or sheep were the most common production specialties, with each accounting for about 45 percent of farms. Forty-three percent of the farms had gross sales below $40,000, while the $40,000-$99,999 category had the highest percentage of farms (29 percent). Ninety percent were organized as individual operations, 3 percent as corporations, and 7 percent as partnerships. A third of farms were larger than 1,000 acres, while only 8 percent were under 100 acres in size. Thirty-two percent of farmers owned all of the land they operated. Full tenants accounted for 14 percent of farms and the remaining 54 percent of farm operators were partial owners of the land they farmed in 1987.

Forty percent of total land operated in the Northern Plains was devoted to crop production, 44 percent went for pasture, 10 percent was idle under Government programs, and the remainder was for summer fallow, woodland or sum other use. Northern Plains farm operators accounted for 14 percent of U.S. livestock sales and 9 percent of all crop sales in 1987. Within the Northern Plains wheat accounted for a third of total crop sales, corn represented 22 percent and soybeans 14 percent. The highest ranking livestock products, in terms of gross sales, were cattle (66 percent) and hogs (16 percent). Three-fourths of all farm or ranch operators participated in government programs, accounting for 20 percent of U.S. total payments. The typical farmer was 51 years old and averaged working 42 hours per week on the farm. Over 80 percent of farm operators indicated that farming was their primary occupation. Eighty-seven percent reported nonfarm earnings representing only 6 percent of U.S. farm operator household off-farm income in 1987.

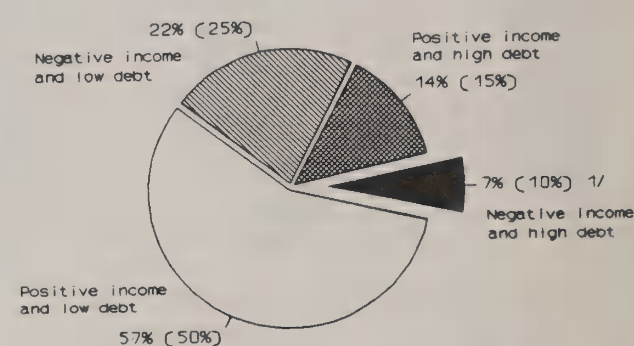
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: KANSAS

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF KANSAS FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Kansas Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Nearly 60 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 7 percent experienced financial difficulties. An additional 14 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only half of Kansas farms were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Kansas farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Nebraska	68	10	17	5
North Dakota	59	25	10	6
South Dakota	72	12	11	5
Northern Plains	64	16	14	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	KS	NE	ND	SD	Northern Plains	U.S
			Acres per farm			
Acres operated 1/	830	880	1,390	1,180	1,020	450
			Dollars per farm			
Crop sales	43,500	30,400	30,800	23,600	33,400	28,900
+ Livestock sales	49,600	56,600	28,400	50,400	47,600	29,500
+ Other farm income	25,200	22,900	23,000	17,800	22,700	11,800
= Gross cash farm income	118,400	109,900	82,200	91,800	103,700	70,200
- Cash operating expenses	84,600	78,500	59,600	64,200	74,000	53,300
= Net cash farm income	33,800	31,400	22,600	27,700	29,700	16,900
Nonfarm income	21,100	13,100	15,900	11,800	16,000	24,900
Net worth	246,800	297,000	344,800	311,700	292,700	296,800
			Ratio			
Debt/asset ratio	0.23	0.17	0.24	0.18	0.20	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Less than 30 percent of Kansas farm operators had a negative net cash income in 1987, and 75 percent of those with negative incomes had a relatively low debt level. Average net cash farm income was more than two times the U.S. value of $16,900. The debt/asset ratio of 0.23 was an improvement over the State's value of 0.28 a year earlier, but was higher than the regional or U.S. average. Kansas had the highest average nonfarm income in the region, at $21,100 in 1987.

The average farm or ranch size in Kansas was 830 acres, 46 percent of which were owned by the operator. Farms with high debt owned a smaller proportion of the land they operated than those with low debt. High debt operators with positive incomes were younger, on average, than those in the other financial categories. Those farmers also had the highest gross and net incomes. Operators with negative incomes and low debt earned the greatest amount of nonfarm income relative to other categories, at $30,000.

Those in the most favorable financial position earned the lowest amount of nonfarm income. The ratio of interest expense to gross income suggests that farms with negative incomes required at least 16 cents from each dollar of gross farm income to pay interest expenses for borrowed capital.

Table 2--Average operating and financial characteristics of Kansas farms by net cash farm income and debt/asset ratio position

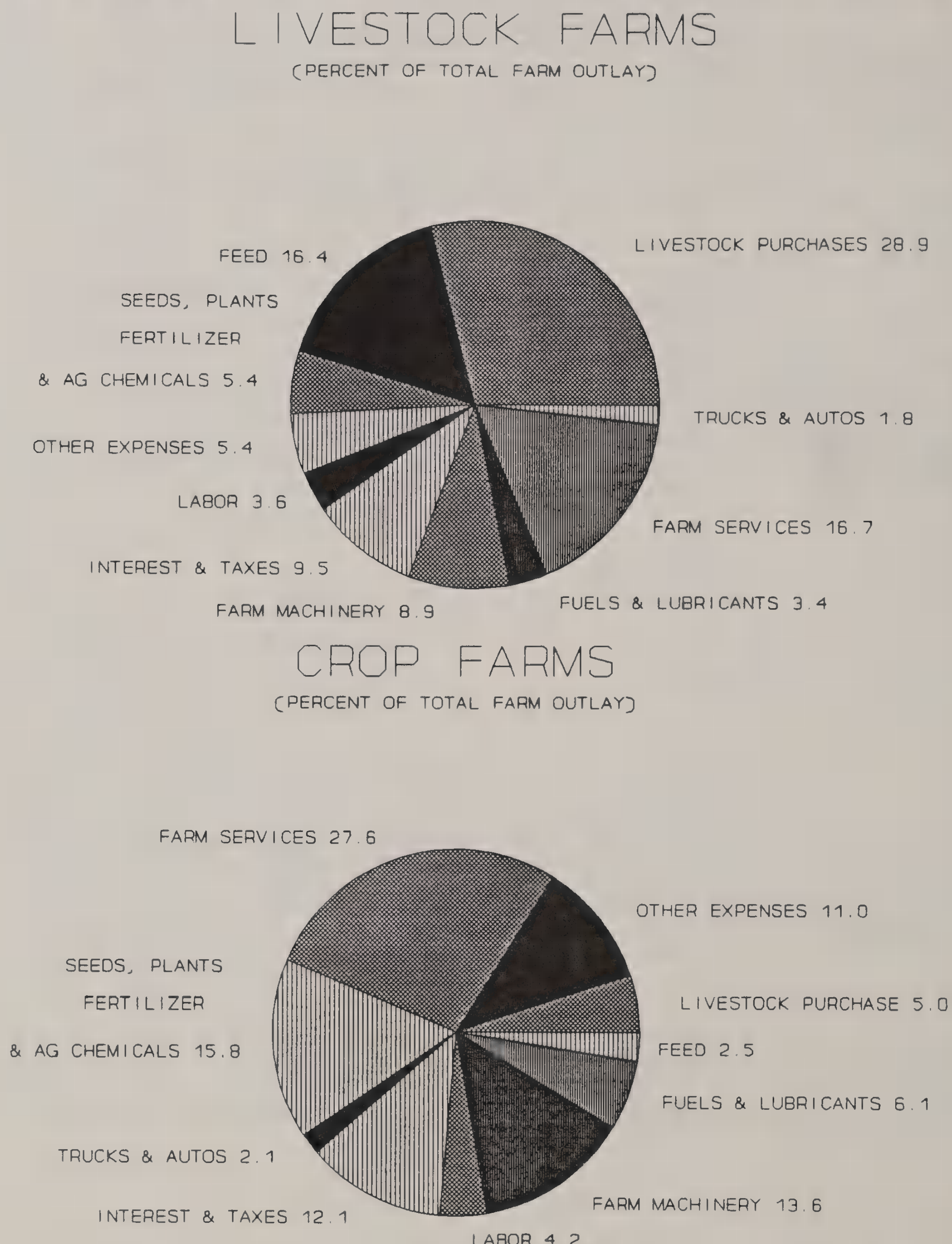
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	57	14	22	7	100
Economic class:					
$40,000 or more	62	18	13	7	100
Less than $40,000	54	d	31	d	100
Type of farm:					
Cash grain	66	12	16	6	100
All crops	63	12	19	6	100
Beef, hog, or sheep	48	16	27	9	100
All livestock or poultry	52	15	25	8	100
			Acres per farm		
Operating:					
Acres owned	420	290	330	420	380
Acres operated	800	1,090	640	1,230	830
			Years		
Operator age	58	42	50	48	53
			Dollars per farm		
Financial:					
Crop sales	32,000	164,000	8,200	13,500	43,500
Livestock sales	36,200	141,400	19,700	76,100	49,600
Other farm income	16,700	93,000	8,300	16,600	25,200
Gross cash farm income	84,900	398,400	36,200	106,300	118,400
Cash operating expenses	52,000	249,600	52,400	132,800	84,600
Net cash farm income	32,900	148,800	-16,200	-26,500	33,800
Nonfarm income	18,300	19,700	30,000	19,400	21,100
Total assets	338,200	315,700	273,500	316,100	319,400
Total debt	29,800	221,900	43,900	225,800	72,600
			Ratio		
Ratios:					
Debt/asset	0.09	0.70	0.16	0.71	0.23
Cash expenses/gross income	.61	.63	1.45	1.25	.71
Interest/gross income	.05	.06	.16	.17	.07

d = Insufficient data for disclosure.

Kansas farms in the larger economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position (62 percent), than farms in the smaller economic class (54 percent). Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Thirty-one percent of operators in this smaller economic class had negative incomes but low debt.

Cash grain farms had the largest proportion of operations in the most financially favorable position (66 percent). Farms in the beef, hog, or sheep category had the lowest proportion of operators in this category, 48 percent. Nine percent of beef, hog, or sheep farms were in the weakest financial position, and over one-fourth of livestock or poultry farms had negative incomes but low debt. The overall financial position of crop farms was stronger than for all livestock operations in 1987.

Figure 2--Northern Plains Farm Production Expenditures by Farm Type



Farm production expenditures in the Northern Plains totaled $14.0 billion in 1987, down 4.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northern Plains included the following States: KS, NE, ND, and SD. Reduced regional outlays for feed; farm services; chemicals; fertilizer; interest; taxes; fuels; farm supplies; building and fencing; and seeds and plants accounted for most of the decline in the region. Expenditures by livestock farms at $7.9 billion were 56 percent of the total regional expenses. Major expense items on livestock farms were livestock and poultry (29 percent), farm services 17 percent, and feed (16 percent). Crop farm expenditures totaled $6.1 billion, 44 percent of the regional expenses. Over two-fifths of the crop farm expenses were for farm services (28 percent) and seeds, plants, fertilizer and chemicals (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northern Plains

Northern Plains (KS, NE, ND AND SD)	Crop Farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	6,091,980	7,895,000	13,986,980
Livestock and poultry	303,762	2,282,804	2,586,566
Feed	151,379	1,295,671	1,447,050
Farm services	1,682,578	1,315,029	2,997,607
Ag. chemicals and sprays	239,319	103,692	343,011
Fertilizer	440,303	194,597	634,900
Interest	569,048	599,500	1,168,548
Taxes (property and real estate)	167,602	147,484	315,086
Labor	255,691	285,376	541,067
Fuels and lubricants	373,308	272,365	645,673
Farm supplies (other)	68,508	71,766	140,274
Building and fencing (other)	57,940	139,887	197,827
Farm and land improvements (other)	28,629	46,942	75,571
Total farm machinery	831,474	703,207	1,534,681
Seeds	280,390	127,828	408,218
Trucks and autos	124,638	145,723	270,361
Other unallocated expenses	517,411	163,128	680,539

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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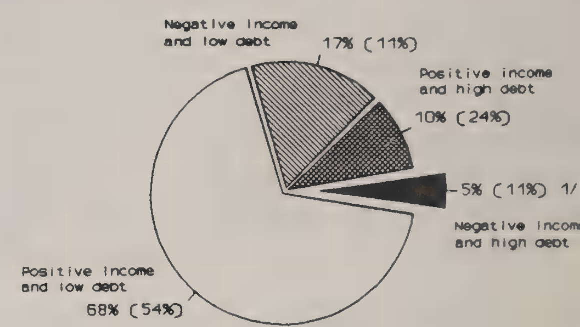
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NEBRASKA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF NEBRASKA FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Nebraska Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Nearly 70 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent experienced financial difficulties. An additional 10 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 54 percent of Nebraska farms were in the most favorable financial situation, while 11 percent were classified in the weakest position.

Figure 1--Distribution of Nebraska farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Kansas	57	14	22	7
North Dakota	59	25	10	6
South Dakota	72	12	11	5
Northern Plains	64	16	14	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	KS	NE	ND	SD	Northern Plains	U.S
			Acres per farm			
Acres operated 1/	830	880	1,390	1,180	1,020	450
			Dollars per farm			
Crop sales	43,500	30,400	30,800	23,600	33,400	28,900
+ Livestock sales	49,600	56,600	28,400	50,400	47,600	29,500
+ Other farm income	25,200	22,900	23,000	17,800	22,700	11,800
= Gross cash farm income	118,400	109,900	82,200	91,800	103,700	70,200
- Cash operating expenses	84,600	78,500	59,600	64,200	74,000	53,300
= Net cash farm income	33,800	31,400	22,600	27,700	29,700	16,900
Nonfarm income	21,100	13,100	15,900	11,800	16,000	24,900
Net worth	246,800	297,000	344,800	311,700	292,700	296,800
			Ratio			
Debt/asset ratio	0.23	0.17	0.24	0.18	0.20	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Less than one-fourth of Nebraska farm operators had a negative net cash income in 1987, and over 75 percent of those with negative incomes had a relatively low debt level. Fifteen percent of farms had debt/asset ratios above 0.40 compared with 35 percent a year earlier. The debt/asset ratio declined from 0.30 in 1986 to the current value of 0.17, giving Nebraska the lowest average debt/asset ratio in the region. Like other States in the region, net cash farm income exceeded nonfarm earnings in 1987.

The average farm or ranch size in Nebraska was 880 acres, 54 percent of which were owned by the operator. On average, farmers with positive net incomes owned and operated more acreage than did farmers with negative incomes. Operators with high debt, regardless of income position, were generally younger than the operators of other farms. The ratio of expenses to gross income was higher for the positive income, high debt group (0.76) than for the positive income, low debt group (0.64). The ratio of interest expense to gross income for farms with high debt but positive income was 0.12, indicating that one-eighth of their gross income paid interest expenses for borrowed capital. Farms with negative net cash income and high debt had the highest ratio of interest to gross income, 40 percent. That group also earned the highest average nonfarm income, at $25,000.

Table 2--Average operating and financial characteristics of Nebraska farms by net cash farm income and debt/asset ratio position

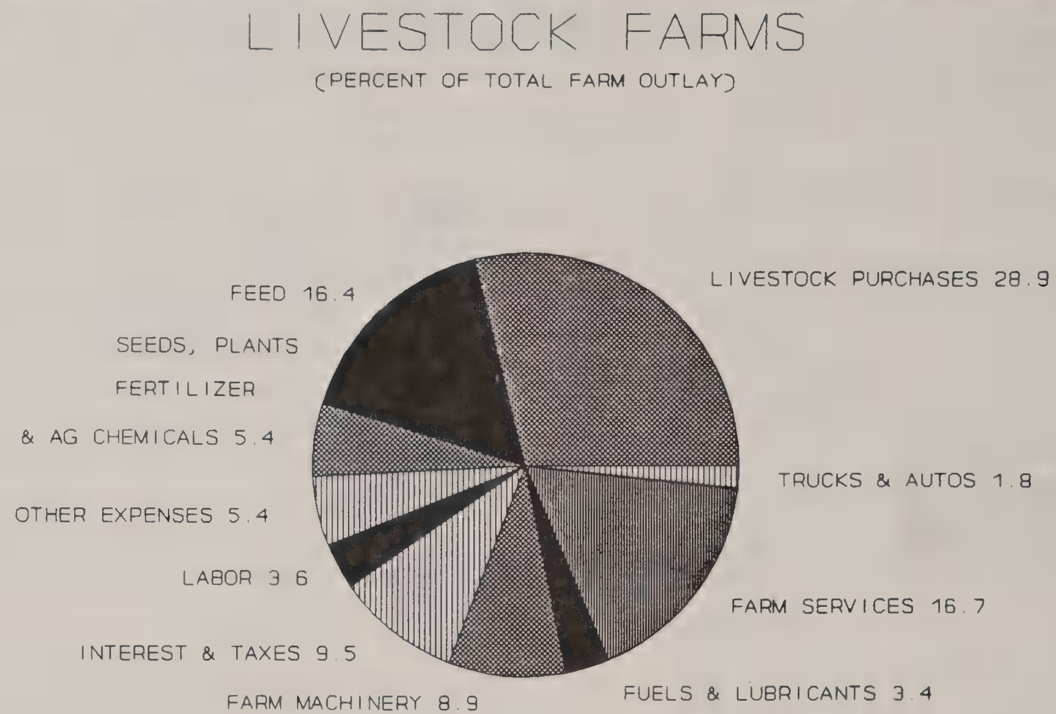
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	68	10	17	5	100
Economic class:					
$40,000 or more	76	14	6	4	100
Less than $40,000	57	d	31	d	100
Type of farm:					
Cash grain	71	d	14	d	100
All crops	70	d	14	d	100
Beef, hog, or sheep	71	6	18	5	100
All livestock or poultry	66	7	20	7	100
			Acres per farm		
Operating:					
Acres owned	600	340	140	230	470
Acres operated	1,010	710	630	330	880
			Years		
Operator age	52	47	51	45	51
			Dollars per farm		
Financial:					
Crop sales	36,500	39,600	8,400	7,000	30,400
Livestock sales	66,200	63,900	25,700	21,300	56,600
Other farm income	26,100	31,900	9,700	8,200	22,900
Gross cash farm income	128,700	135,400	43,800	36,500	109,900
Cash operating expenses	82,800	102,400	56,700	50,300	78,500
Net cash farm income	45,900	33,000	-12,900	-13,900	31,400
Nonfarm income	11,900	11,400	15,300	24,900	13,100
Total assets	412,500	292,700	223,600	197,700	357,100
Total debt	46,000	177,500	27,000	132,400	60,100
			Ratio		
Ratios:					
Debt/asset	0.11	0.61	0.12	0.67	0.17
Cash expenses/gross income	.64	.76	1.29	1.38	.71
Interest/gross income	.04	.12	.09	.40	.06

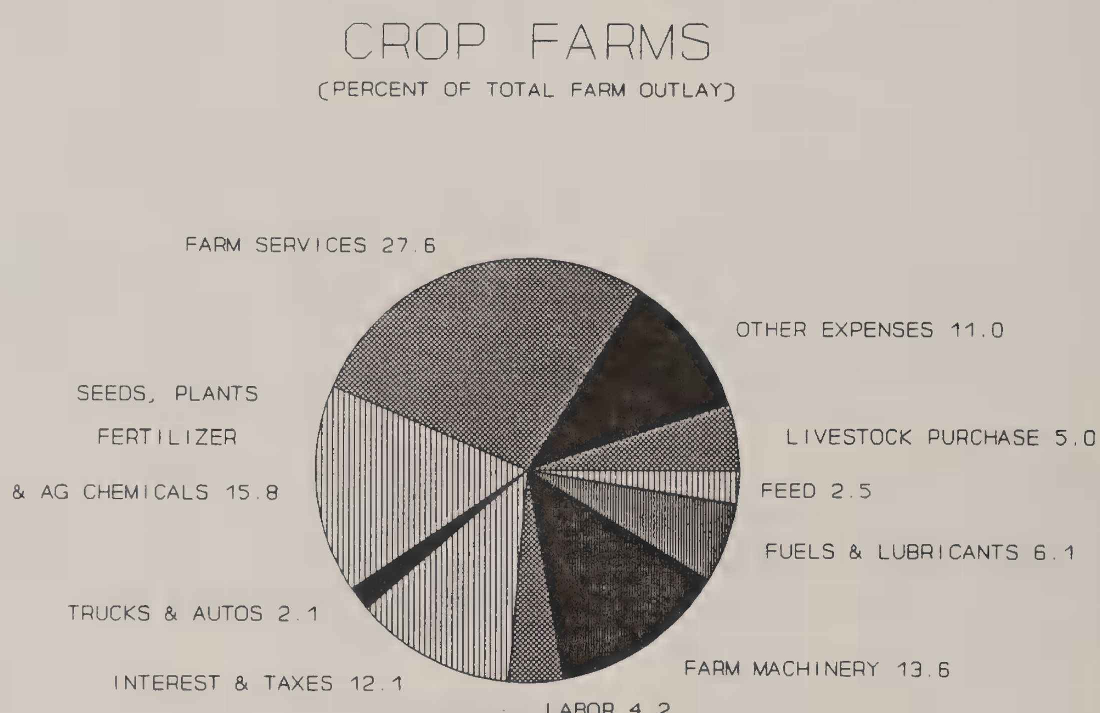
d = Insufficient data for disclosure.

Nebraska farms in the larger economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position (76 percent), than farms in the smaller economic class (57 percent). Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. Thirty-one percent of operators in this smaller economic class had negative incomes but low debt.

Livestock or poultry farms as a group had the largest proportion of operations in the weakest financial position (7 percent). While those farms had about the same proportion with high debt as crop farms had, they were more likely to have negative incomes. Over one-fourth of livestock or poultry farms had negative incomes.

Figure 2--Northern Plains Farm Production Expenditures by Farm Type





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Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northern Plains

Northern Plains (KS, NE, ND AND SD)	Crop Farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	6,091,980	7,895,000	13,986,980
Livestock and poultry	303,762	2,282,804	2,586,566
Feed	151,379	1,295,671	1,447,050
Farm services	1,682,578	1,315,029	2,997,607
Ag. chemicals and sprays	239,319	103,692	343,011
Fertilizer	440,303	194,597	634,900
Interest	569,048	599,500	1,168,548
Taxes (property and real estate)	167,602	147,484	315,086
Labor	255,691	285,376	541,067
Fuels and lubricants	373,308	272,365	645,673
Farm supplies (other)	68,508	71,766	140,274
Building and fencing (other)	57,940	139,887	197,827
Farm and land improvements (other)	28,629	46,942	75,571
Total farm machinery	831,474	703,207	1,534,681
Seeds	280,390	127,828	408,218
Trucks and autos	124,638	145,723	270,361
Other unallocated expenses	517,411	163,128	680,539

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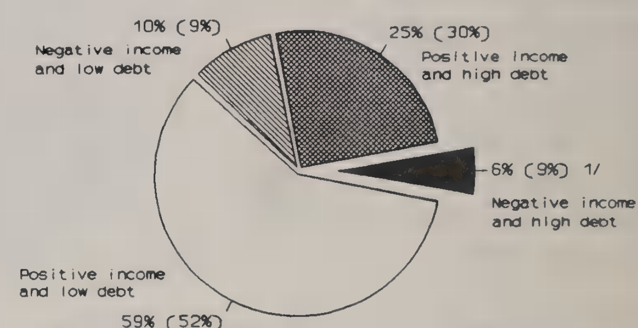
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NORTH DAKOTA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF NORTH DAKOTA FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the North Dakota Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Nearly 60 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 6 percent experienced financial difficulties. An additional 25 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 52 percent of North Dakota farms were in the most favorable financial situation, while 9 percent were classified in the weakest position.

Figure 1--Distribution of North Dakota farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Kansas	57	14	22	7
Nebraska	68	10	17	5
South Dakota	72	12	11	5
Northern Plains	64	16	14	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	KS	NE	ND	SD	Northern Plains	U.S
			Acres per farm			
Acres operated 1/	830	880	1,390	1,180	1,020	450
			Dollars per farm			
Crop sales	43,500	30,400	30,800	23,600	33,400	28,900
+ Livestock sales	49,600	56,600	28,400	50,400	47,600	29,500
+ Other farm income	25,200	22,900	23,000	17,800	22,700	11,800
= Gross cash farm income	118,400	109,900	82,200	91,800	103,700	70,200
- Cash operating expenses	84,600	78,500	59,600	64,200	74,000	53,300
= Net cash farm income	33,800	31,400	22,600	27,700	29,700	16,900
Nonfarm income	21,100	13,100	15,900	11,800	16,000	24,900
Net worth	246,800	297,000	344,800	311,700	292,700	296,800
			Ratio			
Debt/asset ratio	0.23	0.17	0.24	0.18	0.20	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Less than one-fifth of North Dakota farm operators had negative net cash income in 1987, and over 60 percent of those with negative income had a relatively low debt level. The State's net cash farm income averaged $22,600, well above the national average of $16,900. Thirty-one percent of North Dakota farmers had high debt at the end of 1987, the highest within the region and twice the U.S. value. The debt/asset ratio of 0.24 was an improvement over North Dakota's value of 0.33 a year earlier, however.

The average farm or ranch size in North Dakota was 1,390 acres, 55 percent of which were owned by the operator. On average, farmers with negative net incomes owned and operated more acreage than did farmers with positive incomes. Operators with high debt, regardless of income position, were generally younger than the operators of other farms. The ratio of expenses to gross income was higher for the positive income, high debt group (0.70) than for the positive income, low debt group (0.61). The ratio of interest expense to gross income for high debt, positive income farms was 0.16, indicating that sixteen percent of their gross income paid interest expenses for borrowed capital. Farms in the weakest financial position had the highest average gross incomes and expenses. That group also had the highest ratio of interest to gross income, 29 percent, and the lowest average nonfarm income, $5,300.

Table 2--Average operating and financial characteristics of North Dakota farms by net cash farm income and debt/asset ratio position

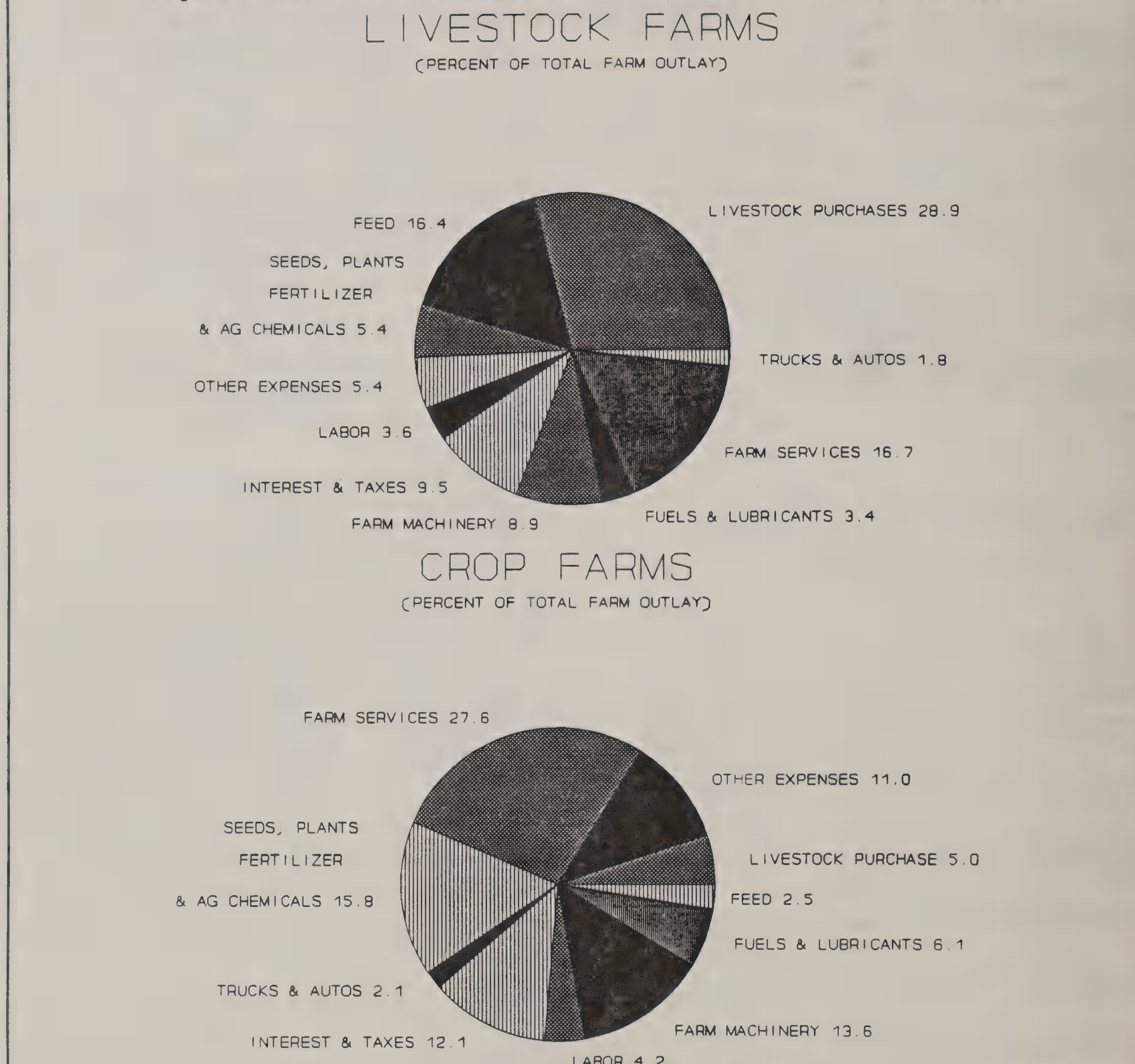
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	59	25	10	6	100
Economic class:					
$40,000 or more	56	27	11	6	100
Less than $40,000	68	d	10	d	100
Type of farm:					
Cash grain	61	21	11	7	100
All crops	63	20	11	6	100
Beef, hog, or sheep	50	38	12	0	100
All livestock or poultry	52	34	d	d	100
			Acres per farm		
Operating:					
Acres owned	800	630	850	930	770
Acres operated	1,300	1,400	1,720	1,710	1,390
			Years		
Operator age	54	40	51	46	50
			Dollars per farm		
Financial:					
Crop sales	33,500	30,900	19,900	21,600	30,800
Livestock sales	27,200	35,700	17,200	30,100	28,400
Other farm income	22,900	19,400	24,500	37,000	23,000
Gross cash farm income	83,600	86,100	61,600	88,600	82,200
Cash operating expenses	50,600	60,500	76,900	120,000	59,600
Net cash farm income	33,000	25,600	-15,300	-31,400	22,600
Nonfarm income	17,800	9,200	26,400	5,300	15,900
Total assets	500,300	303,000	554,400	382,900	450,900
Total debt	55,300	187,800	90,400	318,100	106,100
			Ratio		
Ratios:					
Debt/asset	0.11	0.62	0.16	0.83	0.24
Cash expenses/gross income	.61	.70	1.25	1.35	.73
Interest/gross income	.07	.16	.21	.29	.12

d = Insufficient data for disclosure.

North Dakota farms in the smallest economic class (less than $40,000 in gross cash income from farming) were more likely to be in a favorable financial position (68 percent), than farms in the smaller economic class (56 percent). Farms in the smallest economic class were less likely to have high debt positions, and were slightly more likely to have positive farm incomes.

Crop farms as a group had the largest proportion of operations in the most favorable financial position (63 percent). Producers of cash grains had a weaker overall financial performance than all crop farms. Livestock or poultry producers were more likely than operators of crop farms to carry high debt; over 34 percent of livestock or poultry farmers and 26 percent of crop farm operators had debt/asset ratios in excess of 0.40 at the end of 1987.

Figure 2--Northern Plains Farm Production Expenditures by Farm Type



Farm production expenditures in the Northern Plains totaled $14.0 billion in 1987, down 4.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northern Plains included the following States: KS, NE, ND, and SD. Reduced regional outlays for feed; farm services; chemicals; fertilizer; interest; taxes; fuels; farm supplies; building and fencing; and seeds and plants accounted for most of the decline in the region. Expenditures by livestock farms at $7.9 billion were 56 percent of the total regional expenses. Major expense items on livestock farms were livestock and poultry (29 percent), farm services 17 percent, and feed (16 percent). Crop farm expenditures totaled $6.1 billion, 44 percent of the regional expenses. Over two-fifths of the crop farm expenses were for farm services (28 percent) and seeds, plants, fertilizer and chemicals (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northern Plains

Northern Plains (KS, NE, ND AND SD)	Crop Farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	6,091,980	7,895,000	13,986,980
Livestock and poultry	303,762	2,282,804	2,586,566
Feed	151,379	1,295,671	1,447,050
Farm services	1,682,578	1,315,029	2,997,607
Ag. chemicals and sprays	239,319	103,692	343,011
Fertilizer	440,303	194,597	634,900
Interest	569,048	599,500	1,168,548
Taxes (property and real estate)	167,602	147,484	315,086
Labor	255,691	285,376	541,067
Fuels and lubricants	373,308	272,365	645,673
Farm supplies (other)	68,508	71,766	140,274
Building and fencing (other)	57,940	139,887	197,827
Farm and land improvements (other)	28,629	46,942	75,571
Total farm machinery	831,474	703,207	1,534,681
Seeds	280,390	127,828	408,218
Trucks and autos	124,638	145,723	270,361
Other unallocated expenses	517,411	163,128	680,539

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

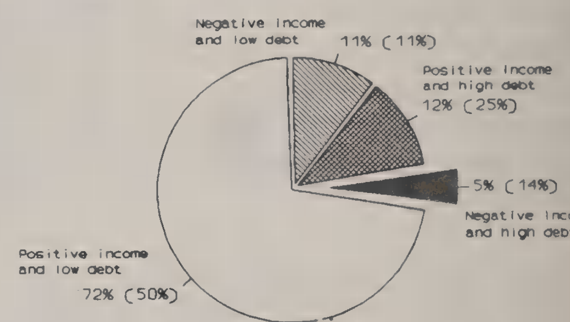
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: SOUTH DAKOTA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF SOUTH DAKOTA FARMS SHOWED CONSIDERABLE IMPROVEMENT DURING 1987, according to a survey conducted by the South Dakota Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 70 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent experienced financial difficulties. An additional 12 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only half of South Dakota farms were in the most favorable financial situation, while 14 percent were classified in the weakest position.

Figure 1--Distribution of South Dakota farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Kansas	57	14	22	7
Nebraska	68	10	17	5
North Dakota	59	25	10	6
Northern Plains	64	16	14	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	KS	NE	ND	SD	Northern Plains	U.S
			per farm			
Acres operated 1/	830	880	1,390	1,180	1,020	450
			Dollars per farm			
Crop sales	43,500	30,400	30,800	23,600	33,400	28,900
+ Livestock sales	49,600	56,600	28,400	50,400	47,600	29,500
+ Other farm income	25,200	22,900	23,000	17,800	22,700	11,800
= Gross cash farm income	118,400	109,900	82,200	91,800	103,700	70,200
- Cash operating expenses	84,600	78,500	59,600	64,200	74,000	53,300
= Net cash farm income	33,800	31,400	22,600	27,700	29,700	16,900
Nonfarm income	21,100	13,100	15,900	11,800	16,000	24,900
Net worth	246,800	297,000	344,800	311,700	292,700	296,800
			Ratio			
Debt/asset ratio	0.23	0.17	0.24	0.18	0.20	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Sixteen percent of South Dakota farm operators had a negative net cash income in 1987, and nearly 70 percent of those with negative incomes had a relatively low debt level. The State's net cash income from farming averaged $27,700, well above the national average of $16,900. Seventeen percent of South Dakota farmers had high debt at the end of 1987, slightly above the U.S. value. The debt/asset ratio of 0.18 was an improvement over South Dakota's value of 0.31 a year earlier, however.

The average farm or ranch size in South Dakota was 1,175 acres, 67 percent of which were owned by the operator. On average, farmers in the most favorable financial position owned more acres than operators in the other financial categories. Farmers with negative net incomes and high debt, however, operated more acreage than did farmers in the other financial categories, but they owned the smallest share of the acres they operated (36 percent). Those operators were generally younger than the operators of other farms. The ratio of expenses to gross income was higher for the positive income, high debt group (0.74) than for the positive income, low debt group (0.61). The ratio of interest expense to gross income for farms with high debt, but positive income was 0.12, indicating that 12 percent of their gross income paid interest expenses for borrowed capital.

Table 2--Average operating and financial characteristics of South Dakota farms by net cash farm income and debt/asset ratio position

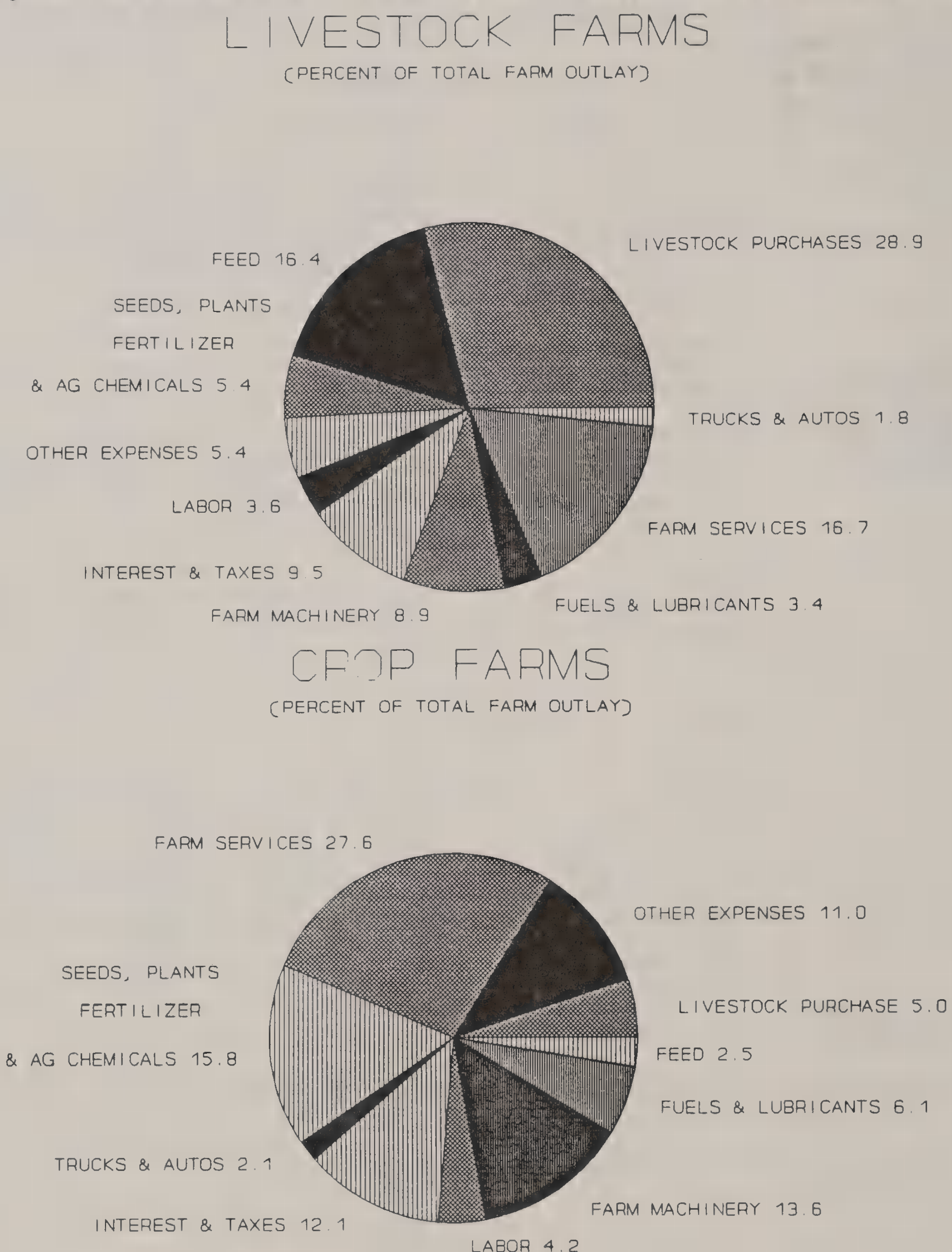
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	72	12	11	5	100
Economic class:					
$40,000 or more	73	12	8	7	100
Less than $40,000	70	d	15	d	100
Type of farm:					
Cash grain	73	8	8	11	100
All crops	71	9	10	10	100
Beef, hog, or sheep	74	11	12	3	100
All livestock or poultry	73	14	11	2	100
			Acres per farm		
Operating:					
Acres owned	870	580	590	590	790
Acres operated	1,220	920	960	1,620	1,180
			Years		
Operator age	53	47	48	40	51
			Dollars per farm		
Financial:					
Crop sales	28,200	21,700	4,800	3,000	23,600
Livestock sales	52,300	62,100	28,000	43,200	50,400
Other farm income	16,100	20,700	17,100	36,200	17,800
Gross cash farm income	96,700	104,400	50,000	82,500	91,800
Cash operating expenses	58,900	76,800	66,100	102,900	64,200
Net cash farm income	37,800	27,600	-16,100	-20,400	27,700
Nonfarm income	10,500	9,800	20,300	16,500	11,800
Total assets	396,900	273,400	410,900	327,400	380,100
Total debt	43,800	175,500	62,500	173,900	68,400
			Ratio		
Ratios:					
Debt/asset	0.11	0.64	0.15	0.53	0.18
Cash expenses/gross income	.61	.74	1.32	1.25	.70
Interest/gross income	.05	.12	.19	.21	.08

d = Insufficient data for disclosure.

The was little disparity between the financial performance of South Dakota farms in the largest and smallest economic classes. Within each economic size group, at least 70 percent of farms had positive net cash farm incomes and low debt. Farms with gross farm sales below $40,000 were more likely to have negative incomes than farms in the larger economic class.

Beef, hog, or sheep farms as a group had the largest proportion of operations in the most favorable financial position (74 percent). However, unlike the other States in the Northern Plains region, all farm type classifications exceeded 70 percent in the favorable classification. Farm operations that specialized in the production of cash grains had the highest percentage in the weakest financial position (11 percent).

Figure 2--Northern Plains Farm Production Expenditures by Farm Type



Farm production expenditures in the Northern Plains totaled $14.0 billion in 1987, down 4.0 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Northern Plains included the following States: KS, NE, ND, and SD. Reduced regional outlays for feed; farm services; chemicals; fertilizer; interest; taxes; fuels; farm supplies; building and fencing; and seeds and plants accounted for most of the decline in the region. Expenditures by livestock farms at $7.9 billion were 56 percent of the total regional expenses. Major expense items on livestock farms were livestock and poultry (29 percent), farm services 17 percent, and feed (16 percent). Crop farm expenditures totaled $6.1 billion, 44 percent of the regional expenses. Over two-fifths of the crop farm expenses were for farm services (28 percent) and seeds, plants, fertilizer and chemicals (16 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Northern Plains

Northern Plains (KS, NE, ND AND SD)	Crop Farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	6,091,980	7,895,000	13,986,980
Livestock and poultry	303,762	2,282,804	2,586,566
Feed	151,379	1,295,671	1,447,050
Farm services	1,682,578	1,315,029	2,997,607
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Fertilizer	440,303	194,597	634,900
Interest	569,048	599,500	1,168,548
Taxes (property and real estate)	167,602	147,484	315,086
Labor	255,691	285,376	541,067
Fuels and lubricants	373,308	272,365	645,673
Farm supplies (other)	68,508	71,766	140,274
Building and fencing (other)	57,940	139,887	197,827
Farm and land improvements (other)	28,629	46,942	75,571
Total farm machinery	831,474	703,207	1,534,681
Seeds	280,390	127,828	408,218
Trucks and autos	124,638	145,723	270,361
Other unallocated expenses	517,411	163,128	680,539

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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APPALACHIA

Appalachia represented 14 percent of all U.S. farms in 1987. Over 60 percent of all crop farms specialized in the production of tobacco, while producers of beef, hogs, or sheep were the most common livestock production specialty. More than 80 percent of farms were in the three smallest economic classes, having less than $40,000 in gross sales during 1987. Ninety-two percent of farms were organized as individual operations, 2 percent as corporations, and 6 percent as partnerships. Half of all farms were under 100 acres in size and only 9 percent operated 500 or more acres. Nearly 60 percent owned all of the land they operated. Full tenants represented 6 percent of farms and the remaining 36 percent were partial owners of the land they farmed in 1987.

Thirty-five percent of total land operated in Appalachia was devoted to cropland, 27 percent to pasture, 10 percent was idle under Government programs, and the remainder was summer fallow, woodlands, or went for some other use. Farm operators in Appalachia accounted for 8 percent of U.S. livestock sales and 8 percent of total crop sales in 1987. Tobacco, nursery and greenhouse products, and soybeans accounted for the largest proportions of crop sales at 39, 18, and 13 percent, respectively. The highest ranking livestock and poultry products, in terms of gross sales, were cattle (23 percent), milk and dairy products (21 percent), and hogs (16 percent). Only 22 percent of farms participated in Government programs, accounting for 4 percent of total U.S. payments. The typical farm operator was 54 years old and averaged working 25 hours per week on the farm. Fifty-one percent considered farming to be their primary occupation. Over 90 percent of farms reported earning nonfarm income which represented 14 percent of all U.S. farm operator household off-farm income.

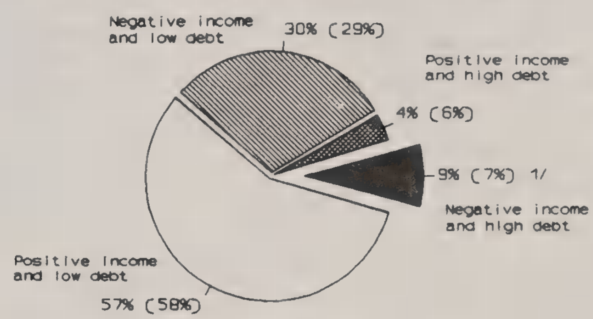
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: KENTUCKY

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF KENTUCKY FARMS WAS AMONG THE BEST IN THE APPALACHIAN REGION AT THE BEGINNING OF 1988, according to a survey conducted by the Kentucky Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-seven percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 9 percent experienced financial difficulties. An additional 4 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 58 percent of Kentucky farmers were in the most favorable financial situation, while 7 percent were classified in the weakest position.

Figure 1--Distribution of Kentucky farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
North Carolina	51	5	41	3
Tennessee	46	5	45	4
Appalachia	49	4	42	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	KY	NC	TN	Appalachia	U.S.
			Acres per farm		
Acres operated 1/	200	180	150	180	450
			Dollars per farm		
Crop sales	10,300	55,700	8,600	21,300	28,900
+ Livestock sales	12,500	35,500	9,100	17,100	29,500
+ Other farm income	3,400	6,000	2,100	3,600	11,800
= Gross cash farm income	26,200	97,100	19,900	42,000	70,200
- Cash operating expenses	22,600	51,600	18,800	28,600	53,300
= Net cash farm income	3,600	45,500	1,100	13,400	16,900
Nonfarm income	26,300	21,200	29,300	26,200	24,900
Net worth	184,200	212,900	177,800	189,100	296,800
			Ratio		
Debt/asset ratio	0.14	0.11	0.10	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Kentucky had only 39 percent of farms with negative net cash farm incomes in 1987. Like for the region as a whole, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for Kentucky was nearly $1,400 higher than for all U.S. farm households and was among the highest in the region. Thirteen percent of farms had high debt levels which nearly mirrored the U.S. percentage, but the average debt/asset ratio was one of the highest in the region.

The average farm size in Kentucky was 200 acres, 75 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. In terms of acreage, farms that had negative incomes and low debt were the smallest. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. The average gross cash farm income for all farm operators was $26,200 and average net cash income was $3,600 in Kentucky in 1987. Average nonfarm income ranged from $15,600 for farms with positive incomes and high debt to $37,600 for low debt, negative income farms.

Table 2--Average operating and financial characteristics of Kentucky farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	57	4	30	9	100
Economic class:					
$40,000 or more	63	17	11	10	100
Less than $40,000	56	d	34	d	100
Type of farm:					
Tobacco	65	26	0	9	100
All crops	63	2	24	11	100
Beef, hog, or sheep	51	4	40	6	100
All livestock or poultry	48	7	39	7	100
			Acres per farm		
Operating:					
Acres owned	180	180	100	100	150
Acres operated	230	450	120	210	200
			Years		
Operator age	56	44	50	42	53
			Dollars per farm		
Financial:					
Crop sales	12,600	30,700	3,500	9,400	10,300
Livestock sales	14,500	63,900	4,000	d	12,500
Other farm income	3,200	10,900	2,600	d	3,400
Gross cash farm income	30,200	105,500	10,100	18,300	26,200
Cash operating expenses	19,200	79,400	19,000	30,500	22,600
Net cash farm income	11,000	26,100	-9,000	-12,100	3,600
Nonfarm income	21,700	15,600	37,600	22,900	26,300
Total assets	214,900	306,600	217,800	146,600	213,500
Total debt	13,300	202,000	14,700	101,700	29,200
			Ratio		
Ratios:					
Debt/asset	0.06	0.66	0.07	0.69	0.14
Cash expenses/gross income	.63	.75	1.88	1.66	.86
Interest/gross income	.05	.12	.16	.44	.10

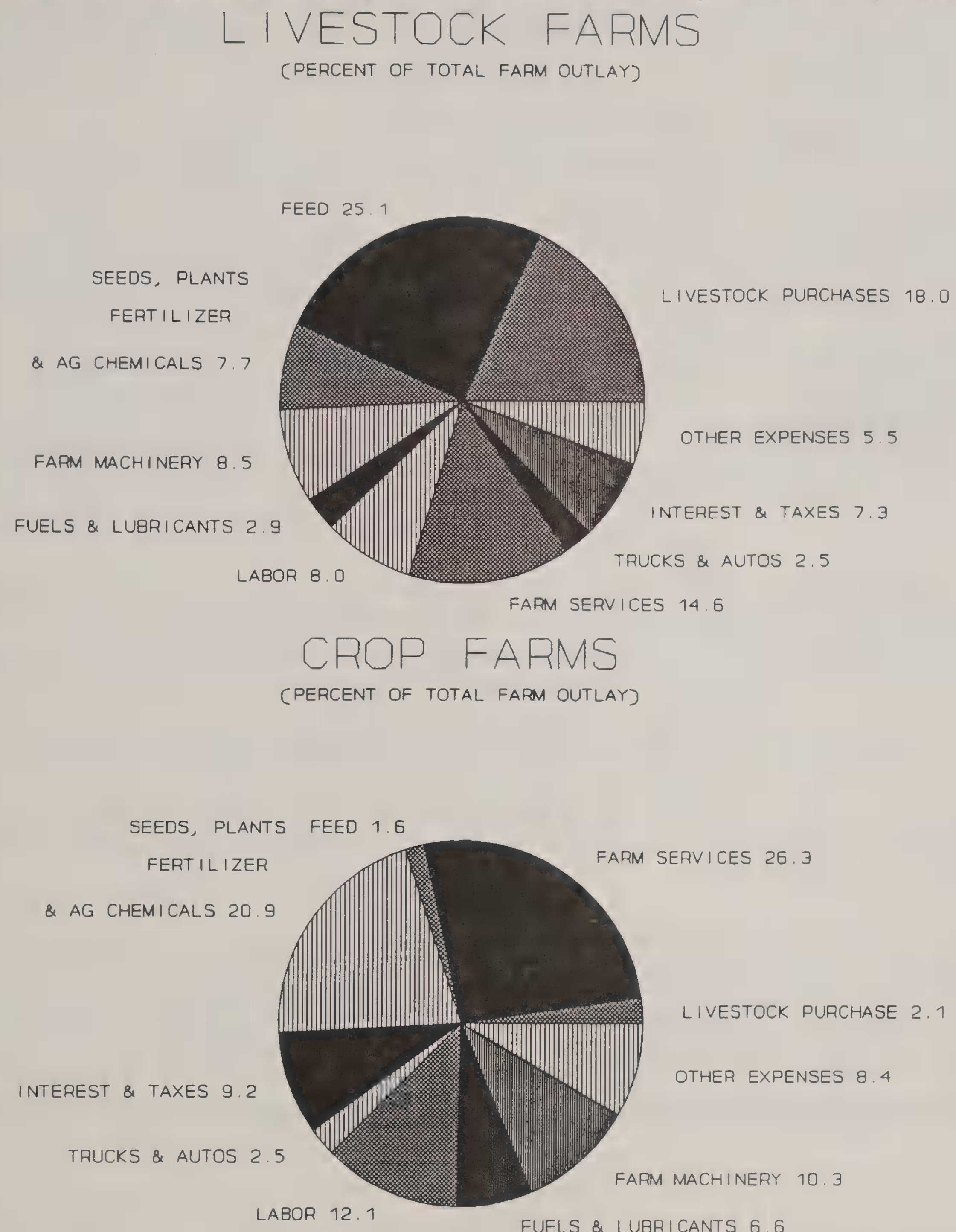
d = Insufficient data for disclosure.

The ratio of expenses to gross income was highest for the negative income, low debt group (1.88), and lowest for the positive income, low debt group (0.63). On average, positive income, high debt farms had the highest gross farm income and net farm income. The ratio of interest expense to gross income for farm in the weakest financial position was 0.44, indicating that 44 percent of their gross income paid interest expenses for borrowed capital.

Kentucky farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 63 percent, than farms in the smaller economic class, 56 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

The overall financial position of farms that specialized in the production of tobacco was stronger than for crop farms in general. Comparing crop and livestock farms indicates that a greater proportion of crop farms had positive incomes and low debt levels, but that a larger percentage of crop farms were in the weakest financial position. Beef, hog, and sheep operations had a relatively stronger financial performance when compared with all livestock farms.

Figure 2--Appalachian Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Appalachian region totaled $7.6 billion in 1987, up 12 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Appalachian Region included the following States: KY, NC, TN, VA, AND WV. Increases in all major regional expense categories were only partially offset by declines in feed, interest, and farm and land improvements. Expenditures by livestock farms at $4.4 billion were 58 percent of the total regional expenses. Major expense items on livestock farms were feed (25 percent), livestock purchases (18 percent) and farm services (15 percent). Crop farm expenditures total $3.2 billion, 42 percent of the regional expenses. About one-half of the crop farm expenses were for farm services (26 percent) and seeds, plants, fertilizer and agricultural chemicals (21 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Appalachian region

Appalachian (KY, NC, TN, VA AND WV)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	3,191,502	4,424,499	7,616,001
Livestock and poultry	66,763	794,424	861,187
Feed	50,284	1,108,946	1,159,230
Farm services	839,071	647,680	1,486,751
Ag. chemicals and sprays	188,621	65,097	253,718
Fertilizer	324,468	215,148	539,616
Interest	235,282	236,655	471,937
Taxes (property and real estate)	57,198	86,799	143,997
Labor	386,116	353,618	739,734
Fuels and lubricants	210,543	129,816	340,359
Farm supplies (other)	75,799	53,240	129,039
Building and fencing (other)	97,691	142,296	239,987
Farm and land improvements (other)	15,300	21,612	36,912
Total farm machinery	328,699	376,864	705,563
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Other unallocated expenses	79,635	25,230	104,865

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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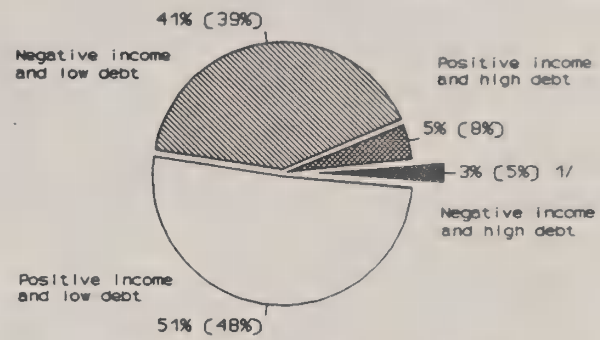
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NORTH CAROLINA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF NORTH CAROLINA FARMS WAS AMONG THE BEST IN THE APPALACHIAN REGION AT THE BEGINNING OF 1988, according to a survey conducted by the North Carolina Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 50 percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 3 percent experienced financial difficulties. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 48 percent of North Carolina farmers were in the most favorable financial situation, while 5 percent were classified in the weakest position.

Figure 1--Distribution of North Carolina farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Tennessee	46	5	45	4
Kentucky	57	4	30	9
Appalachia	49	4	42	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected Average operating and financial characteristics

Item	KY	NC	TN	Appalachia	U.S.
			Acres per farm		
Acres operated 1/	200	180	150	180	450
			Dollars per farm		
Crop sales	10,300	55,700	8,600	21,300	28,900
+ Livestock sales	12,500	35,500	9,100	17,100	29,500
+ Other farm income	3,400	6,000	2,100	3,600	11,800
= Gross cash farm income	26,200	97,100	19,900	42,000	70,200
- Cash operating expenses	22,600	51,600	18,800	28,600	53,300
= Net cash farm income	3,600	45,500	1,100	13,400	16,900
Nonfarm income	26,300	21,200	29,300	26,200	24,900
Net worth	184,200	212,900	177,800	189,100	296,800
			Ratio		
Debt/asset ratio	0.14	0.11	0.10	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

North Carolina had only 44 percent of farms with negative net cash farm incomes in 1987. Like for the region as a whole, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for North Carolina was $3,700 less than for all U.S. farm households and was among the lowest in the region. Only eight percent of farms had high debt levels which was only half the U.S. percentage. The average net worth of $212,900 was the highest in the region, but was below the U.S. average.

The average farm size in North Carolina was 180 acres, half of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. The average gross cash farm income for all farm operators was $97,100 and average net cash income was $45,500 in North Carolina in 1987.

Not surprisingly, farms with positive net incomes had the largest average gross and net incomes. The ratio of expenses to gross income was higher for the positive income, high debt group (0.61), compared with the positive income, low debt group (0.46). Farms in the least favorable financial position had the highest nonfarm income. Those with high debt levels had higher gross incomes than farms with low debt levels as well as higher net farm incomes. The ratio of interest expense to gross income for farms in the weakest financial position was 0.28, indicating that nearly 30 percent of their gross income paid interest expenses for borrowed capital.

Table 2--Average operating and financial characteristics of North Carolina farms by net cash farm income and debt/asset ratio position

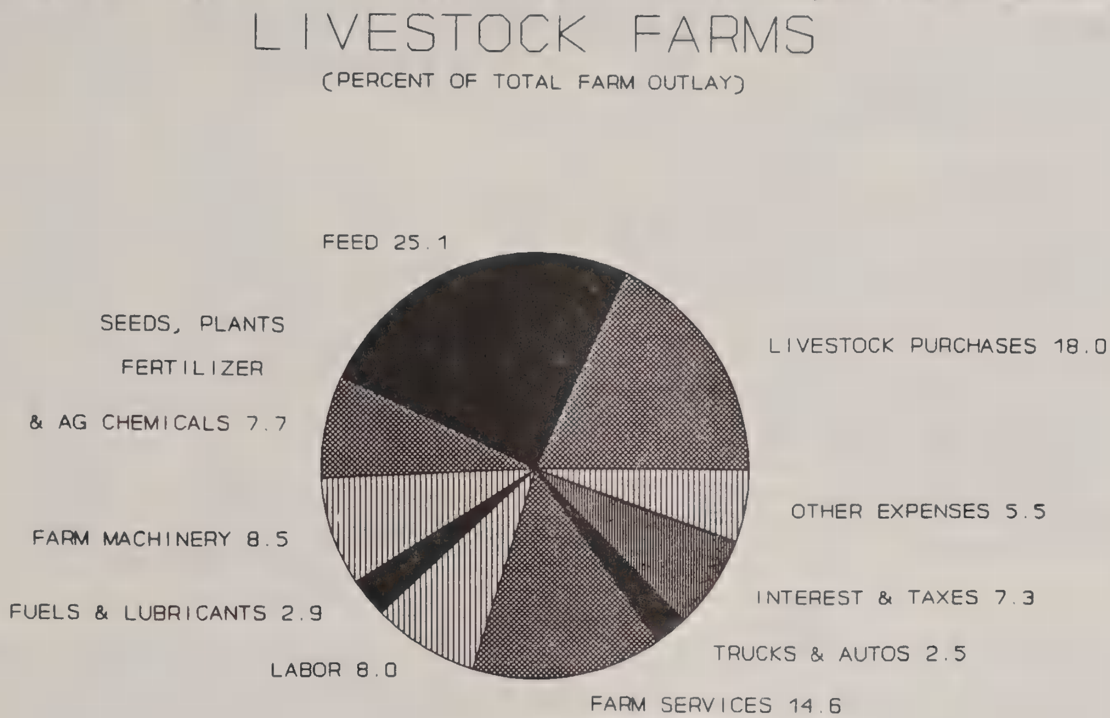
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	51	5	41	3	100
Economic class:					
$40,000 or more	78	12	7	2	100
Less than $40,000	40	2	54	4	100
Type of farm:					
Tobacco	47	d	47	d	100
All crops	58	5	34	4	100
Beef, hog, or sheep	35	d	59	d	100
All livestock or poultry	44	d	48	d	100
			Acres per farm		
Operating:					
Acres owned	100	130	80	80	90
Acres operated	220	360	120	220	180
			Years		
Operator age	53	48	56	36	54
			Dollars per farm		
Financial:					
Crop sales	88,100	165,000	d	19,700	55,700
Livestock sales	58,600	79,500	4,100	d	35,500
Other farm income	9,300	d	800	d	6,000
Gross cash farm income	156,000	261,800	10,900	29,300	97,100
Cash operating expenses	71,200	159,200	16,000	42,600	51,600
Net cash farm income	84,800	102,700	-5,000	-13,300	45,500
Nonfarm income	17,200	17,400	25,600	32,200	21,200
Total assets	291,100	294,300	173,700	196,900	239,900
Total debt	19,600	195,500	10,200	115,700	27,000
			Ratio		
Ratios:					
Debt/asset	0.07	0.66	0.06	0.59	0.11
Cash expenses/gross income	0.46	0.61	1.46	1.45	0.53
Interest/gross income	0.01	0.06	0.11	0.28	0.03

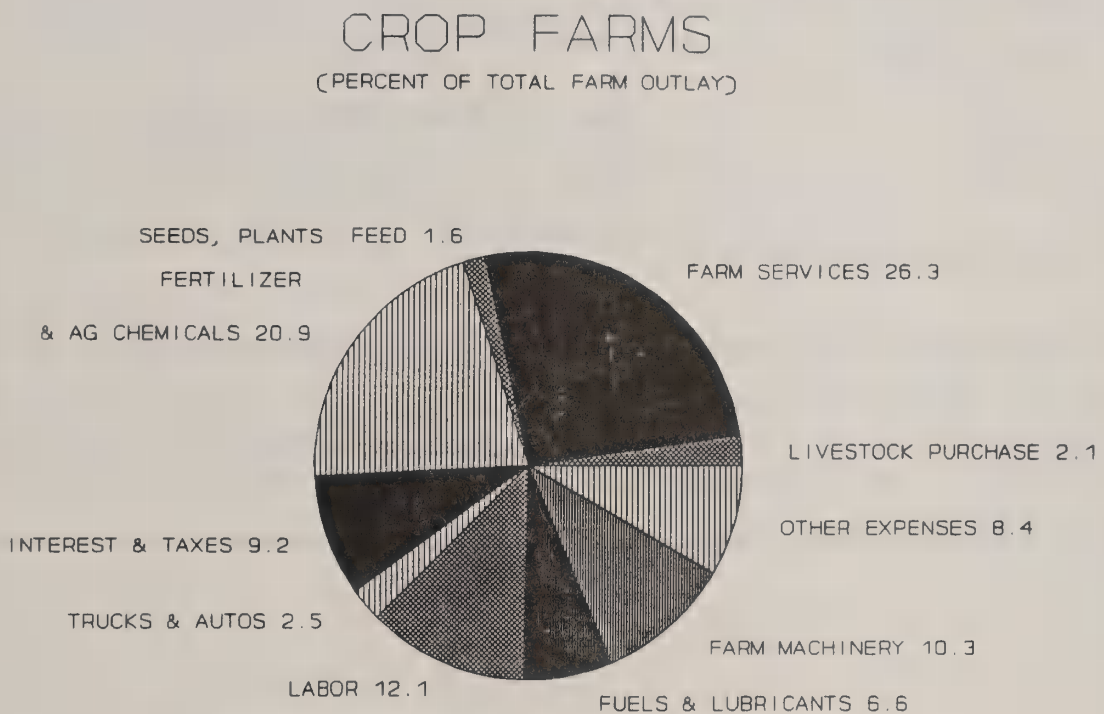
d = Insufficient data for disclosure.

North Carolina farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 78 percent, than farms in the smaller economic class, 40 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

A larger percentage of crop farms had positive incomes and low debt levels than did livestock farms. There was a lower proportion of operations that specialized in the production of tobacco in the strongest financial position when compared with all crop farms. A similar situation occurred when comparing the financial performance of beef, hog, and sheep operations to all livestock and poultry farms.

Figure 2--Appalachian Region Farm Production Expenditures by Farm Type





Farm production expenditures in the Appalachian region totaled $7.6 billion in 1987, up 12 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Appalachian Region included the following States: KY, NC, TN, VA, AND WV. Increases in all major regional expense categories were only partially offset by declines in feed, interest, and farm and land improvements. Expenditures by livestock farms at $4.4 billion were 58 percent of the total regional expenses. Major expense items on livestock farms were feed (25 percent), livestock purchases (18 percent) and farm services (15 percent). Crop farm expenditures total $3.2 billion, 42 percent of the regional expenses. About one-half of the crop farm expenses were for farm services (26 percent) and seeds, plants, fertilizer and agricultural chemicals (21 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Appalachian region

Appalachian (KY, NC, TN, VA AND WV)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	3,191,502	4,424,499	7,616,001
Livestock and poultry	66,763	794,424	861,187
Feed	50,284	1,108,946	1,159,230
Farm services	839,071	647,680	1,486,751
Ag. chemicals and sprays	188,621	65,097	253,718
Fertilizer	324,468	215,148	539,616
Interest	235,282	236,655	471,937
Taxes (property and real estate)	57,198	86,799	143,997
Labor	386,116	353,618	739,734
Fuels and lubricants	210,543	129,816	340,359
Farm supplies (other)	75,799	53,240	129,039
Building and fencing (other)	97,691	142,296	239,987
Farm and land improvements (other)	15,300	21,612	36,912
Total farm machinery	328,699	376,864	705,563
Seeds	154,371	61,674	216,045
Trucks and autos	81,660	105,401	187,061
Other unallocated expenses	79,635	25,230	104,865

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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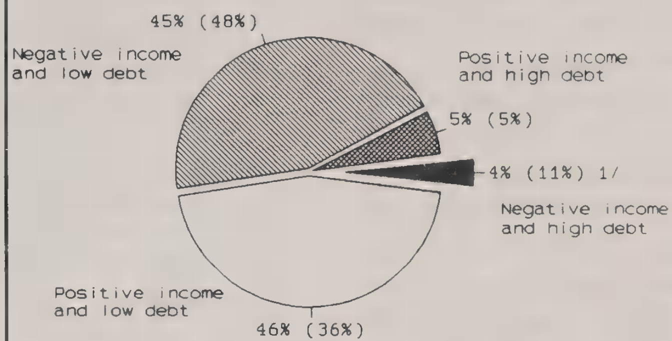
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: TENNESSEE

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF TENNESSEE FARMS IMPROVED DURING 1987, according to a survey conducted by the Tennessee Agricultural Statistics Service. The Farm Costs and Returns Survey (FCRS) was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-six percent of farms were in the most favorable financial position, having positive net cash farm incomes and low relative debt levels. At the other extreme, 4 percent experienced financial difficulties. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 36 percent of Tennessee farmers were in the most favorable financial situation, while 11 percent were classified in the weakest position.

Figure 1--Distribution of Tennessee farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
North Carolina	51	5	41	3
Kentucky	57	4	30	9
Appalachia	49	4	42	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected Average operating and financial characteristics

Item	KY	NC	TN	Appalachia	U.S.
			Acres per farm		
Acres operated 1/	200	180	150	180	450
			Dollars per farm		
Crop sales	10,300	55,700	8,600	21,300	28,900
+ Livestock sales	12,500	35,500	9,100	17,100	29,500
+ Other farm income	3,400	6,000	2,100	3,600	11,800
= Gross cash farm income	26,200	97,100	19,900	42,000	70,200
- Cash operating expenses	22,600	51,600	18,800	28,600	53,300
= Net cash farm income	3,600	45,500	1,100	13,400	16,900
Nonfarm income	26,300	21,200	29,300	26,200	24,900
Net worth	184,200	212,900	177,800	189,100	296,800
			Ratio		
Debt/asset ratio	0.14	0.11	0.10	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Tennessee had 49 percent of farms with negative net cash farm incomes in 1987. Like for the region as a whole, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for Tennessee was $4,400 higher than for all U.S. farm households and was among the highest in the region. The average debt/asset ratio was the lowest in the region and 5 percentage points below the U.S. average. In addition, only nine percent of farms had high debt levels.

The average farm size in Tennessee was 150 acres, two-thirds of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farm operators, regardless of income position, were generally younger than the operators of farms with low debt levels. The average gross cash farm income for all farm operators was $19,900 and average net cash income was $1,100 in Tennessee in 1987. Among financial categories, farms with high debt and positive incomes had the highest average debt/asset ratio, at 0.63.

Table 2--Average operating and financial characteristics of Tennessee farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	46	5	45	4	100
Economic class:					
$40,000 or more	51	14	31	5	100
Less than $40,000	45	3	47	4	100
Type of farm:					
Tobacco	55	25	d	d	100
All crops	55	d	29	d	100
Beef, hog, or sheep	44	d	53	d	100
All livestock or poultry	41	d	55	d	100
			Acres per farm		
Operating:					
Acres owned	120	90	90	60	100
Acres operated	180	170	130	110	150
			Years		
Operator age	55	41	53	40	53
			Dollars per farm		
Financial:					
Crop sales	10,800	d	3,900	6,100	8,600
Livestock sales	9,400	d	8,200	d	9,100
Other farm income	2,600	d	1,100	2,100	2,100
Gross cash farm income	22,800	d	13,200	24,200	19,900
Cash operating expenses	14,600	34,600	19,900	36,700	18,800
Net cash farm income	8,200	19,600	-6,600	-12,500	1,100
Nonfarm income	21,200	23,500	27,200	d	29,300
Total assets	198,900	132,800	195,600	d	197,400
Total debt	7,100	84,000	13,800	150,300	19,600
			Ratio		
Ratios:					
Debt/asset	0.04	0.63	0.07	0.56	0.10
Cash expenses/gross income	.64	.64	1.50	1.52	.95
Interest/gross income	.03	.13	.09	.32	.08

d = Insufficient data for disclosure.

The ratio of expenses to gross income was the same for farms with positive incomes (0.64), but was over 1.50 for operations with negative incomes in 1987. Farms with high debt levels had higher gross incomes than those with low debt levels, as well as, higher net farm incomes. The ratio of interest expense to gross income for farms in the weakest financial position was 0.32, indicating that nearly a third of their gross income paid interest expenses for borrowed capital.

Tennessee farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 51 percent, than farms in the smaller economic class, 45 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

A larger percentage of crop farms had positive incomes and low debt levels than did livestock farms. The financial performance of tobacco farms was similar to all crop farms. Although beef, hog, and sheep operations had relatively low debt levels, many of them had negative net cash farm incomes in 1987; 53 percent had low debt and negative farm incomes.

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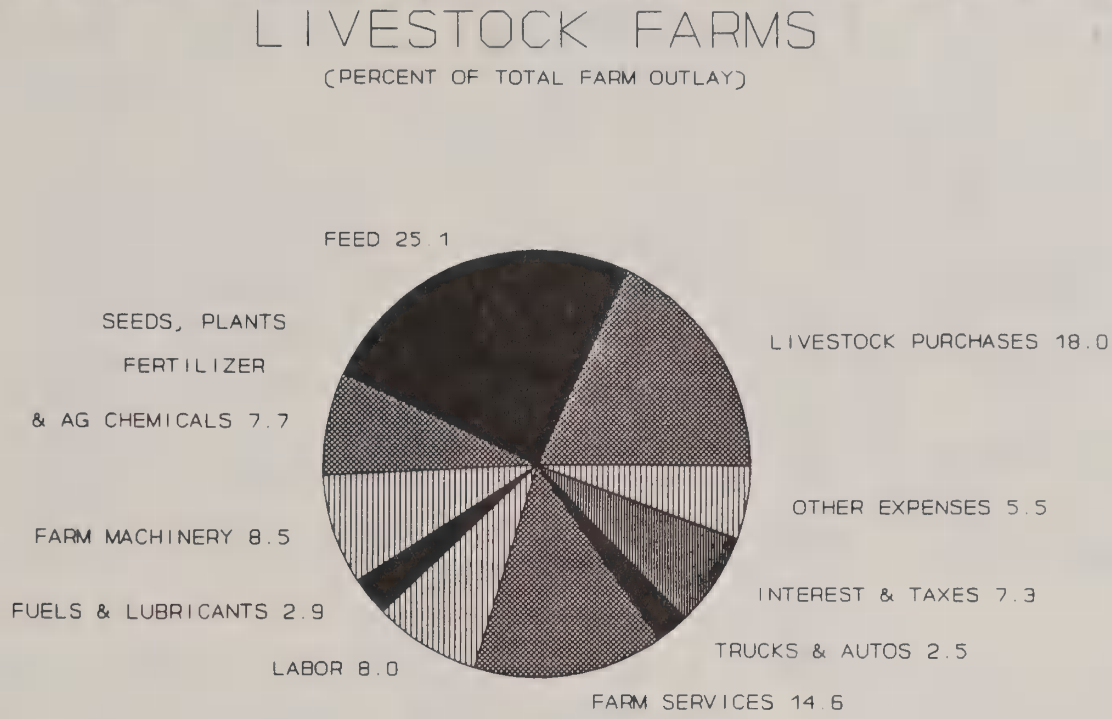

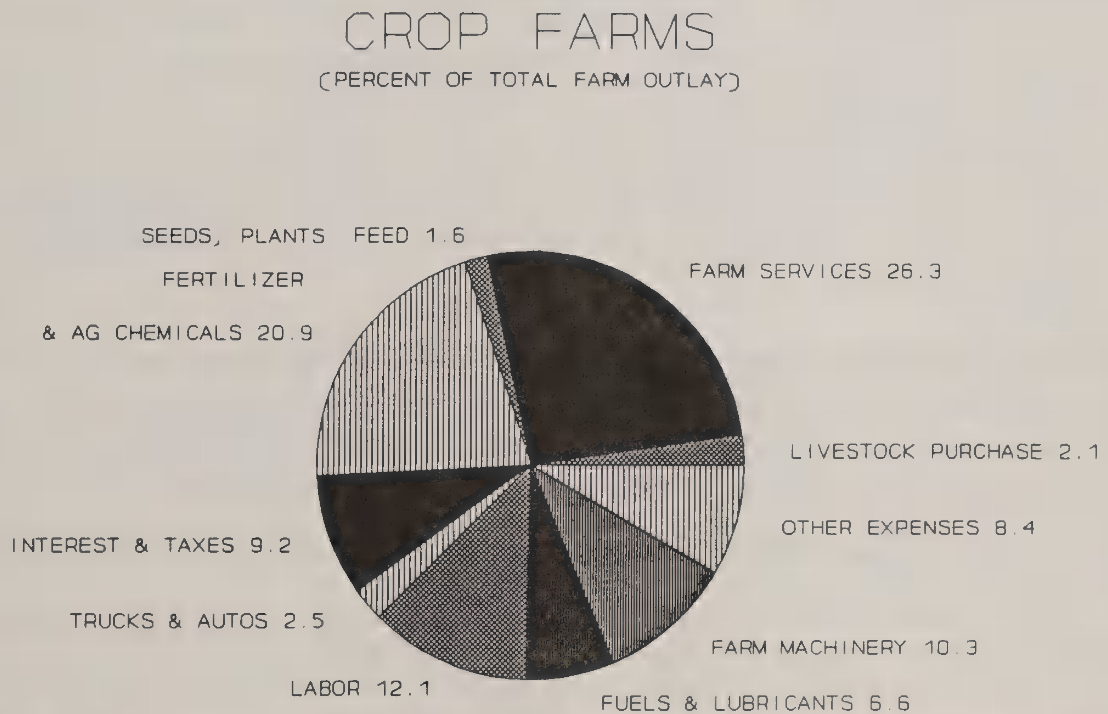

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SOUTHEAST

The Southeast represented 7 percent of all U.S. farms in 1987. Two-thirds of farms were considered livestock operations, with the majority of these farms specializing in the production of beef, hogs, or sheep. The most common crop production specialties were other field crops and cash grains. Nearly 80 percent of farms had gross sales below $40,000 making the Southeast one of the few regions with such a dense population of what are considered to be small farming operations. In terms of acreage operated, a similar proportion of farms were under 250 acres in size. Nearly 60 percent of farm operators owned all of the land they farmed in 1987. Eight percent were full tenants and the remaining one-third were partial owners of total land operated. The Southeast had one of the highest concentrations of corporations (4 percent) and one of the lowest of partnerships (5 percent). Like other regions, the majority (91 percent) of farms were organized as individual operations.

Thirty-two percent of total land operated in the Southeast was devoted to crop land, 29 percent to pasture, 7 percent was idle under government programs, and the remainder went for summer fallow, woodlands or some other use. Farm operators in the Southeast accounted for 5 percent of U.S. livestock sales and 8 percent of crop sales in 1987. The highest ranking crops, in terms of gross sales, were nursery and greenhouse items (23 percent), peanuts (21 percent), tobacco (12 percent), and vegetables (12 percent). Milk and dairy products, cattle, and hogs accounted for the largest proportions of livestock sales at 52, 20, and 11 percent respectively. Only 23 percent of farms participated in Government programs which represented 4 percent of U.S. payments. The typical farm operator was 54 years old and averaged working 26 hours per week on the farm. Fifty-four percent of all farm operators in the Southeast considered farming to be their primary occupation. Over 90 percent farmers and their households reported earning nonfarm income which represented 7 percent of U.S. farm operator off-farm earnings.

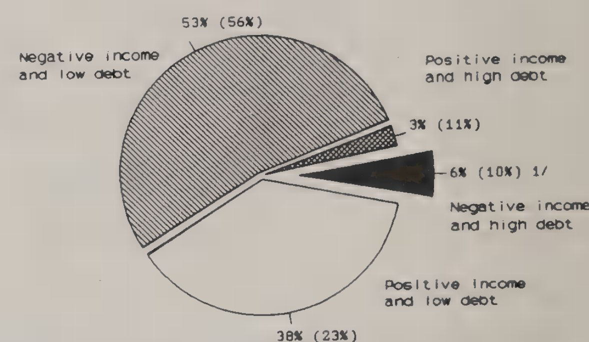
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: FLORIDA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF FLORIDA FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Florida Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-eight percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 6 percent were classified in the weakest financial position. An additional 3 percent of farms had high debt and positive net cash incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 23 percent of Florida farmers were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Florida farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Georgia	37	9	49	5
AL, GA, SC, FL	40	5	50	5
U.S.	49	[illegible]	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	FL	GA	AL, GA SC, FL	US
		Acres per farm		
Acres operated 1/	230	290	250	450
		Dollars per farm		
Crop sales	40,000	75,800	41,500	28,900
+ Livestock sales	46,300	16,800	22,000	29,500
+ Other farm income	7,400	13,300	8,400	11,800
= Gross cash farm income	93,700	105,900	71,900	70,200
- Cash operating expenses	84,100	83,300	60,100	53,300
= Net cash farm income	9,700	22,600	11,800	16,900
Nonfarm income	27,100	22,500	27,000	24,900
Net worth	431,200	278,800	295,700	296,800
		Ratio		
Debt/asset ratio	0.11	0.16	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987, almost three-fifths of Florida farm operators had a negative net cash income. This represents an improvement over a year ago when two out of three farms reported a negative net cash income. Nearly 90 percent of the farms with negative cash income had a relatively low debt level. Average nonfarm income for Florida was $2,200 higher than for all U.S. farm households. The average debt/asset ratio of 0.11 was one of the lowest in the region and below the U.S. average. In addition, only nine percent of Florida farms had debt/asset ratios above 0.40.

The average farm size in Florida was 230 acres, 78 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $93,700 and average net cash income was $9,700. Gross cash income ranged from $13,800 for farms in the weakest financial position to $279,600 for operations with positive incomes and low debt. On average, nonfarm income for farms with positive net farm incomes was below the $27,100 Florida average. The ratio of interest expense to gross income was between 0.03 and 0.07, indicating that less than 10 percent of their gross income paid interest expenses for borrowed capital.

Table 2--Average operating and financial characteristics of Florida farms by net cash farm income and debt/asset ratio position

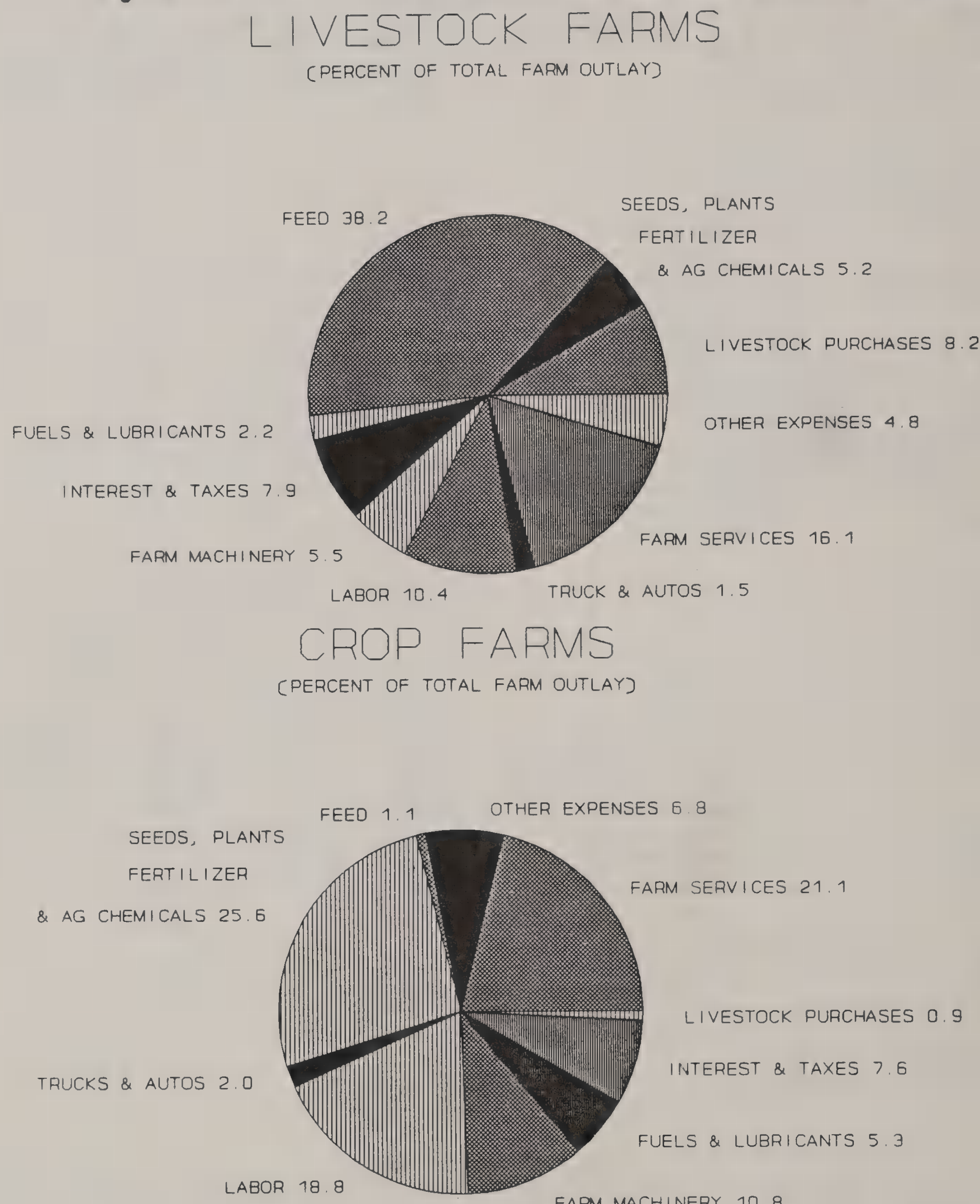
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	38	3	53	6	100
Economic class:					
$40,000 or more	58	d	27	d	100
Less than $40,000	34	0	59	7	100
Type of farm:					
Vegetable, fruit, nursery	54	8	29	9	100
All crops	50	7	36	7	100
Beef, hog, or sheep	31	d	66	d	100
All livestock or poultry	32	0	62	5	100
			Acres per farm		
Operating:					
Acres owned	270	120	130	60	180
Acres operated	360	160	160	80	230
			Years		
Operator age	52	52	57	49	55
			Dollars per farm		
Financial:					
Crop sales	79,900	235,900	4,300	d	40,000
Livestock sales	92,800	26,200	17,800	8,000	46,300
Other farm income	15,000	17,500	1,800	3,000	7,400
Gross cash farm income	187,700	279,600	23,900	13,800	93,700
Cash operating expenses	136,200	218,000	44,300	34,100	84,100
Net cash farm income	51,500	d	-20,400	-20,300	9,700
Nonfarm income	18,300	15,700	34,000	d	27,100
Total assets	575,300	471,300	454,400	209,300	487,100
Total debt	50,800	287,000	37,500	142,900	55,900
			Ratio		
Ratios:					
Debt/asset	0.09	0.61	0.08	0.68	0.11
Cash expenses/gross income	.73	.78	1.85	2.46	.90
Interest/gross income	.03	.07	.16	.83	.06

d = Insufficient data for disclosure.

Florida farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 58 percent, than farms in the smaller economic class, 34 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Only a third of all livestock farms were in the most favorable financial position at the beginning of 1988 compared to over half of all crop farms. However, a lower percentage of livestock farms were in the weakest financial position of high debt and a negative net income. Farms that specialized in the production of vegetable, fruit, or nursery items had a larger proportion of farms with positive incomes and high debt when compared with all crop farms, although they also had a greater percentage with negative incomes and high debt.

Figure 2--Southeast Farm Production Expenditures by Farm Type



Farm production expenditures in the Southeast region totaled $7.6 billion in 1987, up 6.8 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Southeast region included the following States: AL, FL, GA, and SC. Increased regional outlays for feed, farm services, taxes, farm supplies, farm machinery, seeds and plants, and trucks and autos were off set by declines in other major expenditures. Expenditures by livestock farms at $4.3 billion were 57 percent of the total regional expense. Nearly two-third of the livestock farm expenses were for feed (38 percent), farm services (16 percent), and labor (10 percent). Crop farm expenditures totaled $3.3 billion, 43 percent of the regional expenses. Major expenses on crop farms were seeds, plants, fertilizer and chemicals (26 percent), farm services (21 percent), and labor (19 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by farm type, Southeast

Southeast (AL, FL, GA AND SC)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	3,261,733	4,339,426	7,601,159
Livestock and poultry	28,363	356,691	385,054
Feed	34,087	1,658,209	1,692,296
Farm services	692,760	698,883	1,391,643
Ag. chemicals and sprays	299,564	31,773	331,337
Fertilizer	298,846	163,904	462,750
Interest	192,885	253,643	446,528
Taxes (property and real estate)	53,121	87,803	140,924
Labor	614,185	451,567	1,065,752
Fuels and lubricants	172,677	96,685	269,362
Farm supplies (other)	115,157	64,616	179,773
Building and fencing (other)	49,952	118,501	168,453
Farm and land improvements (other)	13,265	19,838	33,103
Total farm machinery	352,303	237,517	589,820
Seeds	237,000	31,433	268,433
Trucks and autos	66,188	62,083	128,271
Other unallocated expenses	21,239	6,280	27,519

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

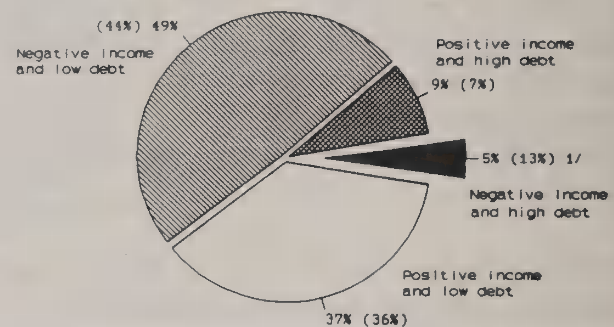
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: GEORGIA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF GEORGIA FARMS SHOWED CONSIDERABLE IMPROVEMENT DURING 1987, according to a survey conducted by the Georgia Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-seven percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent were classified in the weakest financial position. An additional 9 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 36 percent of Georgia farmers were in the most favorable financial situation, while 13 percent were classified in the weakest position.

Figure 1--Distribution of Georgia farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Florida	38	3	53	6
AL, GA, SC, FL	40	5	50	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	FL	GA	AL, GA SC, FL	US
		Acres per farm		
Acres operated 1/	230	290	250	450
		Dollars per farm		
Crop sales	40,000	75,800	41,500	28,900
+ Livestock sales	46,300	16,800	22,000	29,500
+ Other farm income	7,400	13,300	8,400	11,800
= Gross cash farm income	93,700	105,900	71,900	70,200
- Cash operating expenses	84,100	83,300	60,100	53,300
= Net cash farm income	9,700	22,600	11,800	16,900
Nonfarm income	27,100	22,500	27,000	24,900
Net worth	431,200	278,800	295,700	296,800
		Ratio		
Debt/asset ratio	0.11	0.16	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus acres rented to others.

In 1987, more than half of Georgia farm operators had negative net cash incomes, but nearly 90 percent of these farms had relatively low debt levels. This represents an improvement over a year ago when 62 percent of operations surveyed reported negative incomes. Georgia had the largest average gross cash farm income in the region, at $105,900. Average nonfarm income was greater that average net cash earnings from farming. Fourteen percent of Georgia farms had high debt levels which was similar to the U.S. distribution, but their average debt/asset ratio was one of the highest in the region. The average net worth of $278,800 was the lowest in the region.

The average farm size in Georgia was 290 acres, 66 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $105,900 and average net cash income was $22,600. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Georgia farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	37	9	49	5	100
Economic class:					
$40,000 or more	64	22	6	8	100
Less than $40,000	23	3	70	4	100
Type of farm:					
Vegetable, fruit, nursery	30	d	67	d	100
All crops	41	11	40	9	100
Beef, hog, or sheep	27	d	68	d	100
All livestock or poultry	34	8	54	4	100
			Acres per farm		
Operating:					
Acres owned	230	210	140	d	190
Acres operated	390	460	160	470	290
			Years		
Operator age	52	44	58	47	54
			Dollars per farm		
Financial:					
Crop sales	128,400	248,300	6,500	d	75,800
Livestock sales	27,400	46,400	4,200	d	16,800
Other farm income	21,200	44,400	1,500	d	13,300
Gross cash farm income	176,900	339,100	12,300	d	105,900
Cash operating expenses	129,300	238,200	18,000	98,800	83,300
Net cash farm income	47,600	d	-5,700	-24,300	22,600
Nonfarm income	16,200	21,000	26,200	d	22,500
Total assets	371,700	358,500	296,500	355,900	332,900
Total debt	35,500	234,700	15,400	223,200	54,100
			Ratio		
Ratios:					
Debt/asset	0.10	0.65	0.05	0.63	0.16
Cash expenses/gross income	.73	.70	1.47	1.33	.79
Interest/gross income	.03	.06	.12	.27	.05

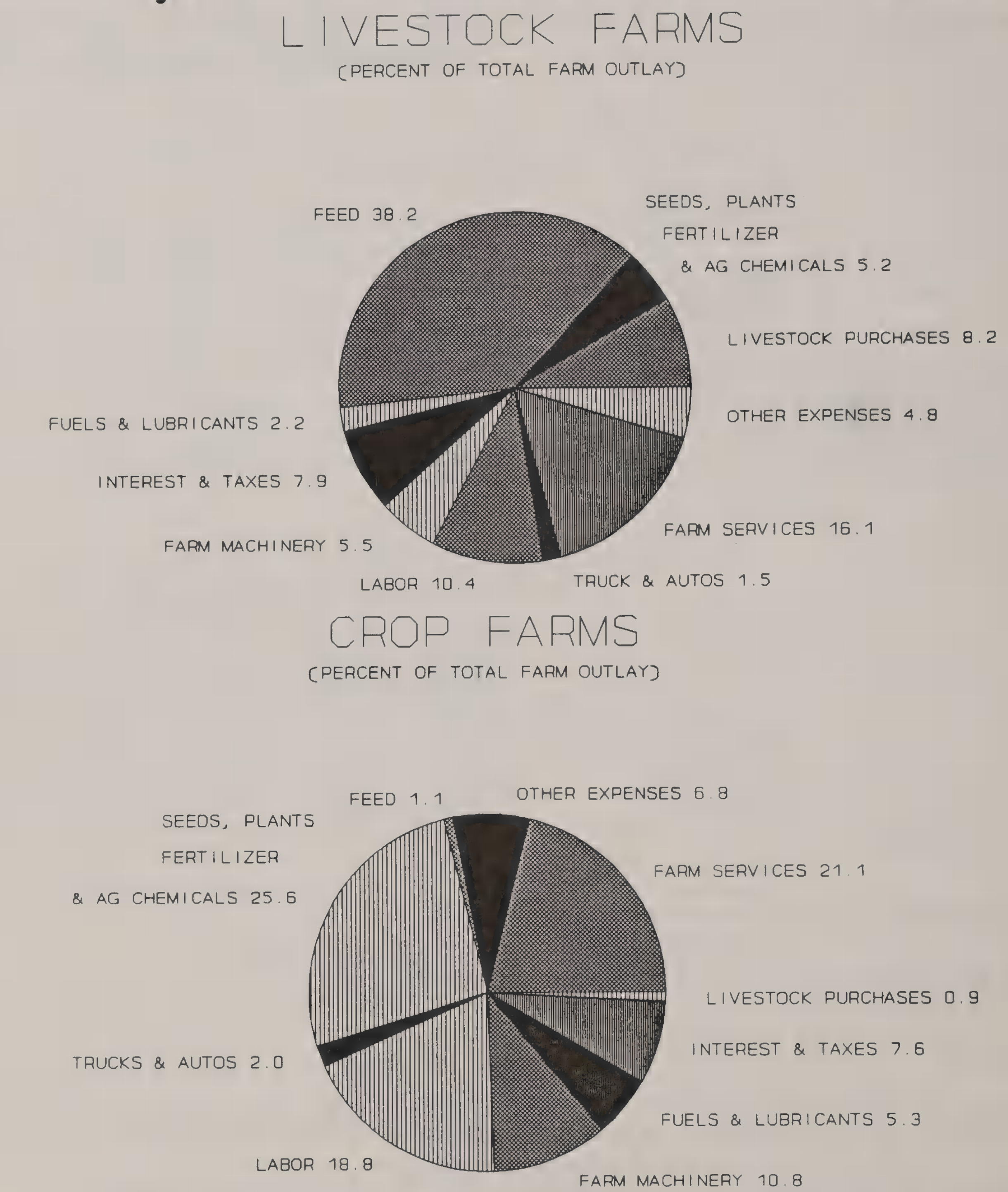
d = Insufficient data for disclosure.

The ratio of expenses to gross income was highest for the negative income, low debt group (1.47) and lowest for the positive income, high debt group (0.70). Operations with high debt levels had higher gross incomes than farms with low debt levels, but the high debt level farms had much lower net farm incomes largely because of interest expense. The ratio of interest expense to gross income for high debt, negative income farms was 0.27, indicating that more than one-fourth of their gross income paid interest expenses for borrowed capital. The remaining high debt farms earned the highest net cash income, a result of having the highest gross farm income and the lowest ratio of operating expenses to gross income of any group.

Georgia farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 64 percent, than farms in the smaller economic class, 23 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had the largest proportion of farms in the most financially favorable position (41 percent). Livestock and poultry operations followed closely with 34 percent in the most favorable financial position. However, a larger percentage of crop farms had negative incomes and high debt at the beginning of 1988 when compared with all livestock farms.

Figure 2--Southeast Farm Production Expenditures by Farm Type



Farm production expenditures in the Southeast region totaled $7.6 billion in 1987, up 6.8 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Southeast region included the following States: AL, FL, GA, and SC. Increased regional outlays for feed, farm services, taxes, farm supplies, farm machinery, seeds and plants, and trucks and autos were off set by declines in other major expenditures. Expenditures by livestock farms at $4.3 billion were 57 percent of the total regional expense. Nearly two-third of the livestock farm expenses were for feed (38 percent), farm services (16 percent), and labor (10 percent). Crop farm expenditures totaled $3.3 billion, 43 percent of the regional expenses. Major expenses on crop farms were seeds, plants, fertilizer and chemicals (26 percent), farm services (21 percent), and labor (19 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by farm type, Southeast

Southeast (AL, FL, GA AND SC)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	3,261,733	4,339,426	7,601,159
Livestock and poultry	28,363	356,691	385,054
Feed	34,087	1,658,209	1,692,296
Farm services	692,760	698,883	1,391,643
Ag. chemicals and sprays	299,564	31,773	331,337
Fertilizer	298,846	163,904	462,750
Interest	192,885	253,643	446,528
Taxes (property and real estate)	53,121	87,803	140,924
Labor	614,185	451,567	1,065,752
Fuels and lubricants	172,677	96,685	269,362
Farm supplies (other)	115,157	64,616	179,773
Building and fencing (other)	49,952	118,501	168,453
Farm and land improvements (other)	13,265	19,838	33,103
Total farm machinery	352,303	237,517	589,820
Seeds	237,000	31,433	268,433
Trucks and autos	66,188	62,083	128,271
Other unallocated expenses	21,239	6,280	27,519

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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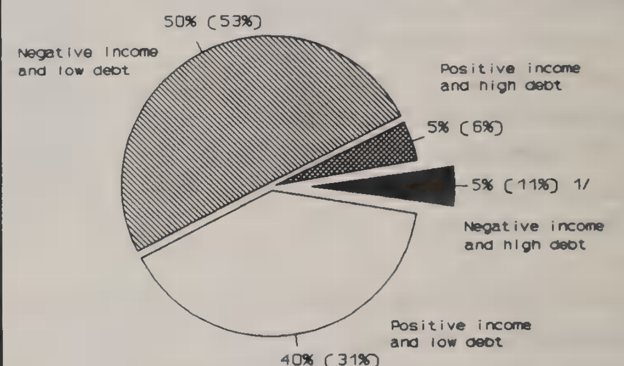
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: ALABAMA, GEORGIA, SOUTH CAROLINA, FLORIDA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF SOUTHEASTERN (ALABAMA, GEORGIA, SOUTH CAROLINA, AND FLORIDA) FARMS SHOWED CONSIDERABLE IMPROVEMENT DURING 1987, according to a survey conducted by each State's Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent were classified in the weakest financial position. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. A year ago only 31 percent of Southeastern farmers were in the most favorable financial situation, while 11 percent were classified in the weakest position.

Figure 1--Distribution of Alabama, Georgia, South Carolina, and Florida farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Florida	38	3	53	6
Georgia	37	9	49	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	FL	GA	AL, GA SC, FL	US
		Acres per farm		
Acres operated 1/	230	290	250	450
		Dollars per farm		
Crop sales	40,000	75,800	41,500	28,900
+ Livestock sales	46,300	16,800	22,000	29,500
+ Other farm income	7,400	13,300	8,400	11,800
= Gross cash farm income	93,700	105,900	71,900	70,200
- Cash operating expenses	84,100	83,300	60,100	53,300
= Net cash farm income	9,700	22,600	11,800	16,900
Nonfarm income	27,100	22,500	27,000	24,900
Net worth	431,200	278,800	295,700	296,800
		Ratio		
Debt/asset ratio	0.11	0.16	0.12	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus acres rented to others.

In 1987, more than half of farm operators in the Southeast had negative net cash incomes. This is an improvement over a year ago when 64 percent of the operations surveyed reported a negative income. Over 90 percent of the farms with negative cash income had a relatively low debt level. Average nonfarm income was about half the average of net cash earnings from farming. Average nonfarm income for the region was $2,100 higher than for all U.S. farm households. Ten percent of Southeastern farms had high debt levels, two-thirds the U.S. distribution. The average debt/asset ratio of 0.12 was below the U.S. average, while average net worth was about the same.

The average farm size in the Southeast was 250 acres, 64 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $71,900 and average net cash income was $11,800. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes. Nonfarm income averaged $27,000 for the region.

Table 2--Average operating and financial characteristics of Southeastern farms by net cash farm income and debt/asset ratio position

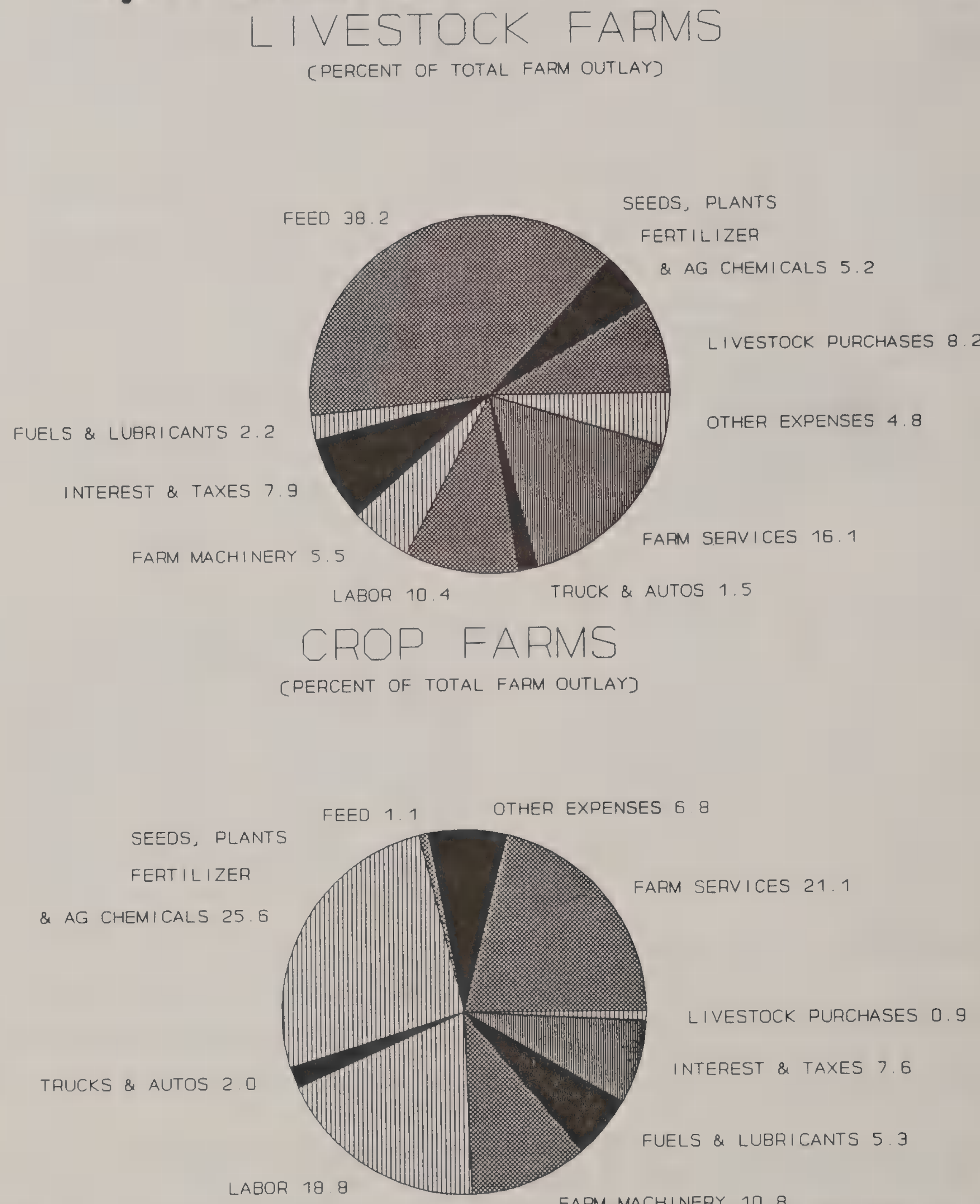
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	40	5	50	5	100
Economic class:					
$40,000 or more	65	18	12	5	100
Less than $40,000	33	2	60	5	100
Type of farm:					
Vegetable, fruit, nursery	51	8	35	7	100
All crops	46	10	37	6	100
Beef, hog, or sheep	34	1	61	4	100
All livestock or poultry	37	3	56	4	100
			Acres per farm		
Operating:					
Acres owned	220	180	110	160	160
Acres operated	350	430	150	270	250
			Years		
Operator age	54	43	56	46	54
			Dollars per farm		
Financial:					
Crop sales	72,300	177,700	4,000	25,900	41,500
Livestock sales	39,500	34,700	8,100	7,700	22,000
Other farm income	14,700	29,600	1,200	7,200	8,400
Gross cash farm income	126,500	242,000	13,300	40,800	71,900
Cash operating expenses	90,000	177,700	23,400	63,400	60,100
Net cash farm income	36,500	64,200	-10,100	-22,700	11,800
Nonfarm income	18,400	26,400	30,800	58,600	27,000
Total assets	381,700	312,900	310,900	245,300	336,000
Total debt	29,500	203,600	19,500	164,800	40,300
			Ratio		
Ratios:					
Debt/asset	0.08	0.65	0.06	0.67	0.12
Cash expenses/gross income	.71	.73	1.76	1.56	.84
Interest/gross income	.03	.07	.15	.34	.05

The ratio of expenses to gross income was higher for the positive income, high debt group (0.73), compared with the positive income, low debt group (0.71). Those with high debt levels had higher gross incomes than farms with low debt levels, but the high debt level farms had much higher net farm incomes, the opposite of what is usually seen since interest expenses usually predominate. The ratio of interest expense to gross income for high debt, positive income farms was 0.07, indicating that very little money was being borrowed. The remaining positive income low debt farms earned the highest net cash income, a result of having the highest gross farm income and the lowest ratio of operating expenses to gross income of any group.

Southeastern farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 65 percent, than farms in the smaller economic class, 33 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Comparing all crop and all livestock and poultry producers indicates that a higher percentage of crop farms were in the strongest financial position having positive incomes and low debt. A higher proportion of crop farms (16 percent) had debt/asset ratios above 0.40 than did livestock farms (7 percent).

Figure 2--Southeast Farm Production Expenditures by Farm Type



Farm production expenditures in the Southeast region totaled $7.6 billion in 1987, up 6.8 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Southeast region included the following States: AL, FL, GA, and SC. Increased regional outlays for feed, farm services, taxes, farm supplies, farm machinery, seeds and plants, and trucks and autos were off set by declines in other major expenditures. Expenditures by livestock farms at $4.3 billion were 57 percent of the total regional expense. Nearly two-third of the livestock farm expenses were for feed (38 percent), farm services (16 percent), and labor (10 percent). Crop farm expenditures totaled $3.3 billion, 43 percent of the regional expenses. Major expenses on crop farms were seeds, plants, fertilizer and chemicals (26 percent), farm services (21 percent), and labor (19 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by farm type, Southeast

Southeast (AL, FL, GA AND SC)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	3,261,733	4,339,426	7,601,159
Livestock and poultry	28,363	356,691	385,054
Feed	34,087	1,658,209	1,692,296
Farm services	692,760	698,883	1,391,643
Ag. chemicals and sprays	299,564	31,773	331,337
Fertilizer	298,846	163,904	462,750
Interest	192,885	253,643	446,528
Taxes (property and real estate)	53,121	87,803	140,924
Labor	614,185	451,567	1,065,752
Fuels and lubricants	172,677	96,685	269,362
Farm supplies (other)	115,157	64,616	179,773
Building and fencing (other)	49,952	118,501	168,453
Farm and land improvements (other)	13,265	19,838	33,103
Total farm machinery	352,303	237,517	589,820
Seeds	237,000	31,433	268,433
Trucks and autos	66,188	62,083	128,271
Other unallocated expenses	21,239	6,280	27,519

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

DELTA

The Delta region was estimated to have 5 percent of all U.S. farms in 1987. Over 60 percent of farms specialized in the production of beef, hogs, or sheep, while cash grain represented the next most common production specialty. Three in four farms had gross sales below $40,000 in 1987. Seventy percent of farms were less than 250 acres in size and 8 percent operated more than 1,000 acres. Fifty-six percent owned all of the land they operated. Full tenants accounted for 10 percent of farms and the remaining one-third were partial owners of the land they farmed in 1987. The Delta region had the lowest concentration of corporations (2 percent) and one of the lowest of partnerships (5 percent). Like other regions the majority of farms were organized as individual operations (93 percent).

Nearly half of total land operated in the Delta region was devoted to cropland, 29 percent to pasture, 8 percent was idle under Government programs, and the remainder went for summer fallow, woodlands, or some other use. Farm operators in the Delta accounted for only 3 percent of U.S. livestock sales and 5 percent of total crop sales in 1987. The highest ranking crops, in terms of gross sales, were cotton (29 percent), soybeans (27 percent), and rice (19 percent). Cattle and milk and dairy products were the most important livestock commodities. Twenty-three percent of farm participated in Government programs, representing 5 percent of U.S. payments. The typical farm operator was 54 years old and averaged working 29 hours per week on the farm. Fifty-eight percent of farm operators in the Delta region considered farming to be their primary occupation. Nearly 90 percent of farmers and their households reported earning nonfarm income which represented 5 percent of U.S. farm operator off-farm income.

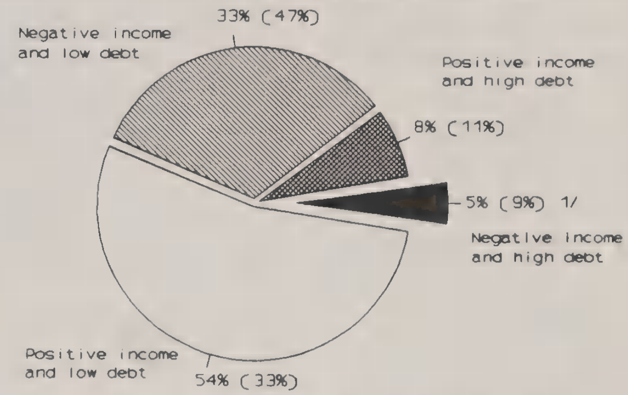
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: ARKANSAS

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF ARKANSAS FARMS SHOWED CONSIDERABLE IMPROVEMENT DURING 1987, according to a survey conducted by the Arkansas Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Fifty-four percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent were classified in the weakest financial position. An additional 8 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 33 percent of Arkansas farmers were in the most favorable financial situation, while 9 percent were classified in the weakest position.

Figure 1--Distribution of Arkansas farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Mississippi	47	5	42	6
AR,LA,MS	48	7	40	5
U.S.	49	[illegible]	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as [illegible] debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40

Table 1--Selected average operating and financial characteristics

Item	AR	MS	Delta	U.S.
		Acres per farm		
Acres operated 1/	344	280	320	450
		Dollars per farm		
Crop sales	54,400	26,300	39,100	28,900
+ Livestock sales	18,100	22,200	19,500	29,500
+ Other farm income	13,000	7,500	10,000	11,800
= Gross cash farm income	85,500	56,100	68,600	70,200
- Cash operating expenses	61,000	43,200	51,400	53,300
= Net cash farm income	24,500	12,900	17,200	16,900
Nonfarm income	29,000	21,000	26,800	24,900
Net worth	353,600	219,300	285,600	296,800
		Ratio		
Debt/asset ratio	0.10	0.15	0.13	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) less land rented to others.

In 1987, 38 percent of Arkansas farms had a negative net income, while nearly 90 percent of these farms had a relatively low debt level. A year ago 56 percent of operators reported a negative income. Most of these farms were also low debt operations. Average nonfarm income was greater that average net cash earnings from farming. Average nonfarm income for Arkansas was nearly $4,000 higher than for all U.S. farm households and was among the highest for the region. Thirteen percent of Arkansas farms had debt/asset ratios above 0.40 which was down from the 20 percent a year ago and less than the current U.S. percentage. Arkansas had the lowest average debt/asset ratio and the highest net worth in the region.

The average farm size in Arkansas was 340 acres, 52 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned and operated the smallest farms. High debt operators were generally younger than the operators of other farms. The average gross cash farm income was $85,500 and average net cash income was $24,500. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Arkansas farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	54	8	33	5	100
Economic class:					
$40,000 or more	66	17	11	7	100
Less than $40,000	48	4	43	4	100
Type of farm:					
Cash grain	59	20	7	14	100
All crops	55	17	17	11	100
Beef, hog, or sheep	48	d	48	d	100
All livestock or poultry	53	d	38	d	100
			Acres per farm		
Operating:					
Acres owned	240	110	130	120	180
Acres operated	420	490	180	360	340
			Years		
Operator age	55	44	55	47	54
			Dollars per farm		
Financial:					
Crop sales	74,700	136,000	5,700	27,300	54,400
Livestock sales	23,900	19,600	9,200	d	18,100
Other farm income	17,900	26,400	2,400	7,800	13,000
Gross cash farm income	116,500	182,000	17,200	46,400	85,500
Cash operating expenses	73,400	107,000	28,500	67,800	61,000
Net cash farm income	43,200	75,000	-11,200	-21,400	24,500
Nonfarm income	20,600	13,200	48,200	18,500	29,000
Total assets	439,700	214,100	387,800	220,600	393,200
Total debt	26,300	135,700	20,600	152,100	39,600
			Ratio		
Ratios:					
Debt/asset	0.06	0.63	0.05	0.69	0.10
Cash expenses/gross income	.63	.59	1.65	1.46	.71
Interest/gross income	.03	.07	.27	.23	.06

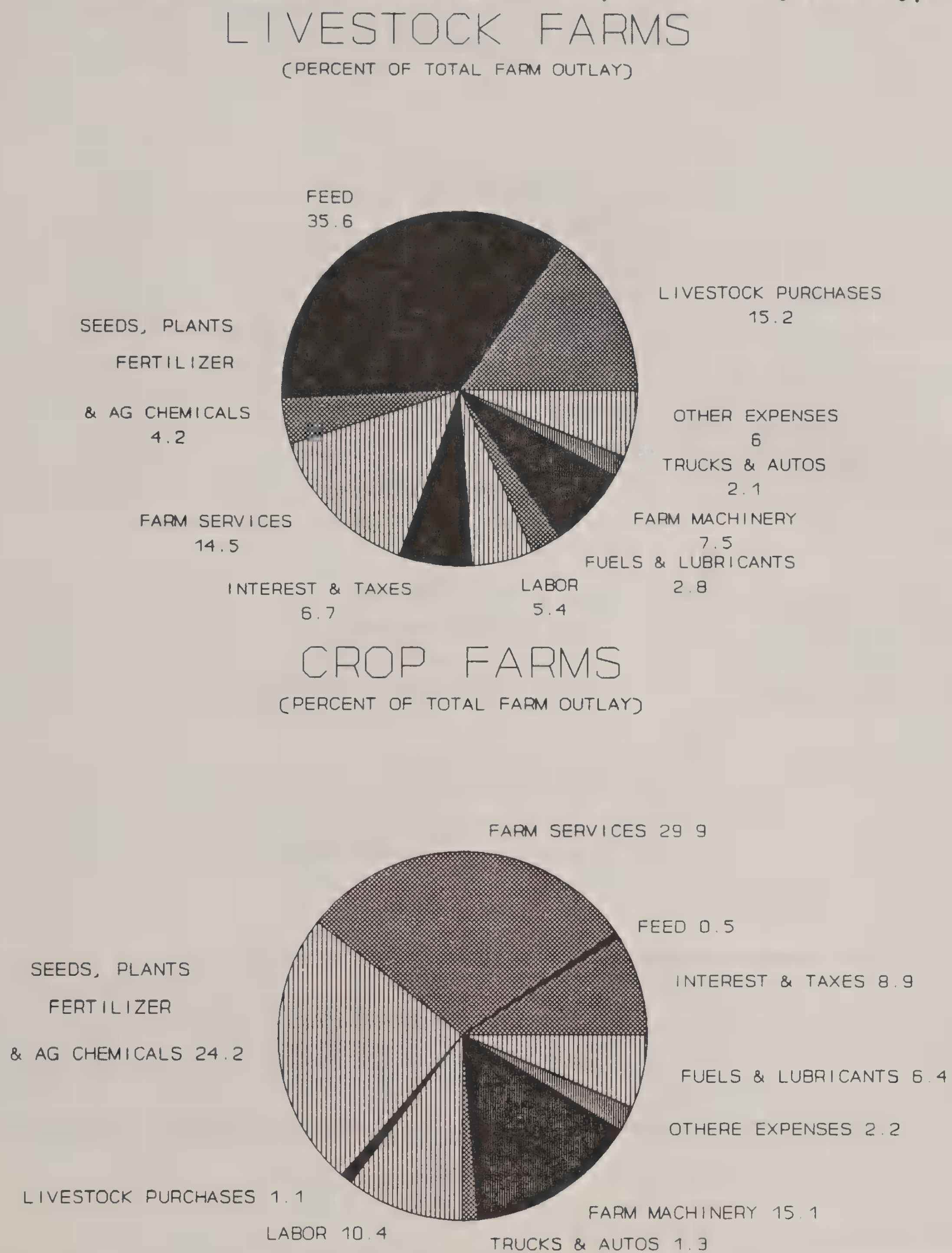
d = Insufficient data for disclosure.

The ratio of expenses to gross income was lowest for the positive income, high debt group (0.59), and highest for the negative income, low debt group (1.65). Farms with negative net cash income had the lowest gross farm incomes and the highest nonfarm income. The ratio of interest expense to gross income for farms in the weakest financial position was 0.23, indicating that more than a fifth of their gross income paid interest expenses for borrowed capital. The remaining high debt farms earned the highest average net cash income, a result of having the highest gross farm income and the lowest ratio of operating expenses to gross income of any group.

Arkansas farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 66 percent, than farms in the smaller economic class, 48 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

A larger proportion of crop farms were in the most financially favorable position than livestock operations. Farms that specialized in the production of cash grains had a higher percentage of operations in both the strongest and weakest financial categories than did crop farms in general. A lower proportion of beef, hog, and sheep operations had positive incomes and low debt than did all livestock farms.

Figure 2--Delta Farm Production Expenditures by Farm Type



Farm production expenditures in the Delta region totaled $5.3 billion in 1987, up 11 percent from 1986 according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Delta region included the following States: AR, LA, and MS. Increased regional outlays for livestock and poultry purchases, feed, farm services, taxes, labor, farm supplies, farm and land improvements, farm machinery, and trucks and autos were partially offset by declines in other major expenses. Expenditures by livestock farms at $2.7 billion were 51 percent of the total regional expenses. Over one-half of the livestock farm expenses were for feed (36 percent) and livestock and poultry purchases (15 percent). Crop farm expenditures totaled $2.6 billion, 49 percent of the regional expenses. Major expense items were farm services (30 percent) and seeds, plants, fertilizer and chemicals (24 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Delta

Delta (AR, LA AND MS)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	2,597,315	2,680,279	5,277,594
Livestock and poultry	27,784	408,678	436,462
Feed	12,060	952,638	964,698
Farm services	777,487	389,196	1,166,683
Ag. chemicals and sprays	267,869	18,267	286,136
Fertilizer	225,568	79,495	305,063
Interest	208,512	144,422	352,934
Taxes (property and real estate)	21,653	35,635	57,288
Labor	268,923	144,331	413,254
Fuels and lubricants	167,378	74,725	242,103
Farm supplies (other)	15,593	40,758	56,351
Building and fencing (other)	14,536	98,479	113,015
Farm and land improvements (other)	15,730	19,658	35,388
Total farm machinery	392,833	200,499	593,332
Seeds	134,594	15,872	150,466
Trucks and autos	34,625	56,985	91,610
Other unallocated expenses	12,168	641	12,809

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

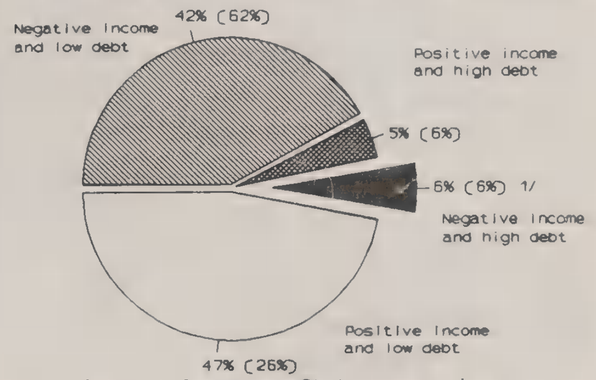
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: MISSISSIPPI

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF MISSISSIPPI FARMS SHOWED SOME IMPROVEMENT DURING 1987, according to a survey conducted by the Mississippi Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-seven percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels, while 6 percent were classified in the weakest financial position. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 26 percent of Mississippi farms were in the most favorable financial situation, while 6 percent were classified in the weakest position.

Figure 1--Distribution of Mississippi farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income: Low debt 2/	Positive income: High debt 3/	Negative income: Low debt	Negative income: High debt
	Percent of farms			
Arkansas	54	8	33	5
AR, LA, MS	48	7	40	5
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	AR	MS	Delta	U.S.
		Acres per farm		
Acres operated 1/	344	280	320	450
		Dollars per farm		
Crop sales	54,400	26,300	39,100	28,900
+ Livestock sales	18,100	22,200	19,500	29,500
+ Other farm income	13,000	7,500	10,000	11,800
= Gross cash farm income	85,500	56,100	68,600	70,200
- Cash operating expenses	61,000	43,200	51,400	53,300
= Net cash farm income	24,500	12,900	17,200	16,900
Nonfarm income	29,000	21,000	26,800	24,900
Net worth	353,600	219,300	285,600	296,800
		Ratio		
Debt/asset ratio	0.10	0.15	0.13	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) less land rented to others.

Nearly half of the Mississippi farm operators surveyed had negative net cash incomes in 1987. However, almost 90 percent of these farms had a relatively low debt level. This is an improvement over a year ago when two-thirds of the operators surveyed reported a negative income. Average 1987 nonfarm income for Mississippi was nearly $4,000 less than for all U.S. farm households. Eleven percent of Mississippi farms had high debt levels which was somewhat less than the U.S. percentage, but the average debt/asset ratio of 0.15 was equal to that of the U.S. and higher than other States in the Delta. Average net worth of $219,300 was the lowest in the region.

The average farm size in Mississippi was 280 acres, 57 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated considerably more acreage than did farms with negative incomes. High debt operators, regardless of income position, were generally younger than the operators of other farms. Average gross cash farm income was $56,100 and average net cash income was $12,900. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Mississippi farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	47	5	42	6	100
Economic class:					
$40,000 or more	59	25	12	4	100
Less than $40,000	44	1	48	7	100
Type of farm:					
Cotton	65	15	12	8	100
All crops	56	19	20	5	100
Beef, hog, or sheep	41	1	50	8	100
All livestock or poultry	44	2	47	7	100
			Acres per farm		
Operating:					
Acres owned	160	160	160	100	160
Acres operated	310	680	210	230	280
			Years		
Operator age	57	36	56	49	55
			Dollars per farm		
Financial:					
Crop sales	38,300	133,700	2,600	8,000	26,300
Livestock sales	24,000	d	8,200	d	22,200
Other farm income	11,300	31,000	1,100	3,900	7,600
Gross cash farm income	73,600	304,400	11,900	18,300	56,100
Cash operating expenses	51,400	186,900	18,700	28,600	43,200
Net cash farm income	22,200	117,400	-6,800	-10,300	12,900
Nonfarm income	19,800	d	22,800	21,600	21,000
Total assets	300,200	351,400	217,200	132,200	257,200
Total debt	19,000	326,000	13,000	105,700	38,000
			Ratio		
Ratios:					
Debt/asset	0.06	0.93	0.06	0.80	0.15
Cash expenses/gross income	.70	.61	1.57	1.56	.77
Interest/gross income	.03	.08	.12	.38	.06

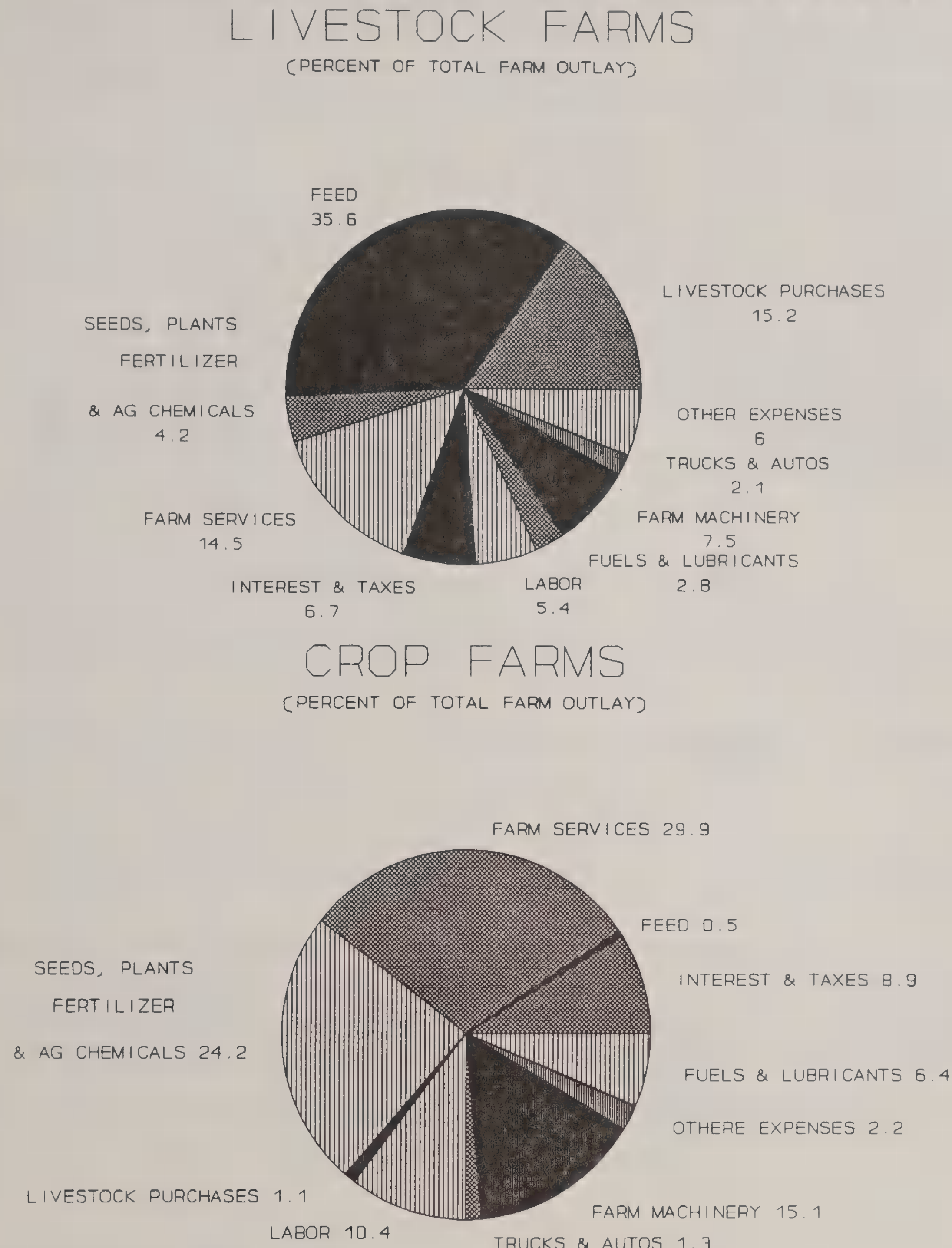
d = Insufficient data for disclosure.

The ratio of expenses to gross income was lowest for the positive income, high debt group (0.61), and highest for the negative income, low debt group (1.57). Farms with negative net cash income had the lowest gross farm incomes and the highest nonfarm income. More than half of the high debt level farms had negative net cash incomes largely because of interest expense. The ratio of interest expense to gross income for this group was 0.38. The remaining high debt farms earned the highest net cash income, a result of having the highest gross farm income and the lowest ratio of operating expenses to gross income of any group.

Mississippi farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 59 percent, than farms in the smaller economic class, 44 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Farms that specialized in the production of cotton had a larger proportion of farms in the most financially favorable position. Overall, crop farms had a higher proportion of farms in a favorable position and fewer in the weakest financial position in comparison to livestock operations. Nearly twice as many livestock farms reported a negative cash income as did crops farms in 1987.

Figure 2--Delta Farm Production Expenditures by Farm Type



Farm production expenditures in the Delta region totaled $5.3 billion in 1987, up 11 percent from 1986 according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Delta region included the following States: AR, LA, and MS. Increased regional outlays for livestock and poultry purchases, feed, farm services, taxes, labor, farm supplies, farm and land improvements, farm machinery, and trucks and autos were partially offset by declines in other major expenses. Expenditures by livestock farms at $2.7 billion were 51 percent of the total regional expenses. Over one-half of the livestock farm expenses were for feed (36 percent) and livestock and poultry purchases (15 percent). Crop farm expenditures totaled $2.6 billion, 49 percent of the regional expenses. Major expense items were farm services (30 percent) and seeds, plants, fertilizer and chemicals (24 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Delta

Delta (AR, LA AND MS)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	2,597,315	2,680,279	5,277,594
Livestock and poultry	27,784	408,678	436,462
Feed	12,060	952,638	964,698
Farm services	777,487	389,196	1,166,683
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Fertilizer	225,568	79,495	305,063
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Farm supplies (other)	15,593	40,758	56,351
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Farm and land improvements (other)	15,730	19,658	35,388
Total farm machinery	392,833	200,499	593,332
Seeds	134,594	15,872	150,466
Trucks and autos	34,625	56,985	91,610
Other unallocated expenses	12,168	641	12,809

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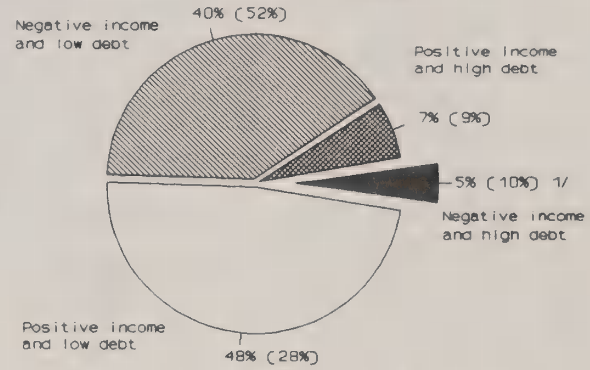
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: ARKANSAS, MISSISSIPPI, LOUISIANA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF FARMS IN THE DELTA SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the National Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-eight percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 5 percent were classified in the weakest financial position. An additional 7 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 28 percent of Delta farmers were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Arkansas, Louisiana, and Mississippi farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Arkansas	54	8	33	5
Mississippi	47	5	42	6
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	AR	MS	Delta	U.S.
		Acres per farm		
Acres operated 1/	344	280	320	450
		Dollars per farm		
Crop sales	54,400	26,300	39,100	28,900
+ Livestock sales	18,100	22,200	19,500	29,500
+ Other farm income	13,000	7,500	10,000	11,800
= Gross cash farm income	85,500	56,100	68,600	70,200
- Cash operating expenses	61,000	43,200	51,400	53,300
= Net cash farm income	24,500	12,900	17,200	16,900
Nonfarm income	29,000	21,000	26,800	24,900
Net worth	353,600	219,300	285,600	296,800
		Ratio		
Debt/asset ratio	0.10	0.15	0.13	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) less land rented to others.

Survey data showed that 45 percent of Arkansas, Louisiana, and Mississippi farms had a negative net income in 1987. Nearly 90 percent of the farms with negative cash income had a relatively low debt level. A year ago 62 percent of operators reported a negative income. Most of these farms were also low debt operations. Average nonfarm income was greater that average net cash earnings from farming. Nonfarm income for Delta farmers averaged $26,800, which was nearly $2,000 higher than for all U.S. farm households. Twelve percent of the farms had debt/asset ratios above 0.40 which was down from the 20 percent a year ago and less than the U.S. percentage.

The average farm size in the Delta was 320 acres, 50 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farms with positive incomes were the largest in terms of acreage. Generally, high debt operators were younger than operators with low debt/asset ratios. Average gross cash farm income ranged from $14,800 for negative income, low debt operations to $221,600 for farms with positive incomes and high debt.

Table 2--Average operating and financial characteristics of Arkansas, Louisiana, and Mississippi farms by net cash farm income and debt/asset ratio position

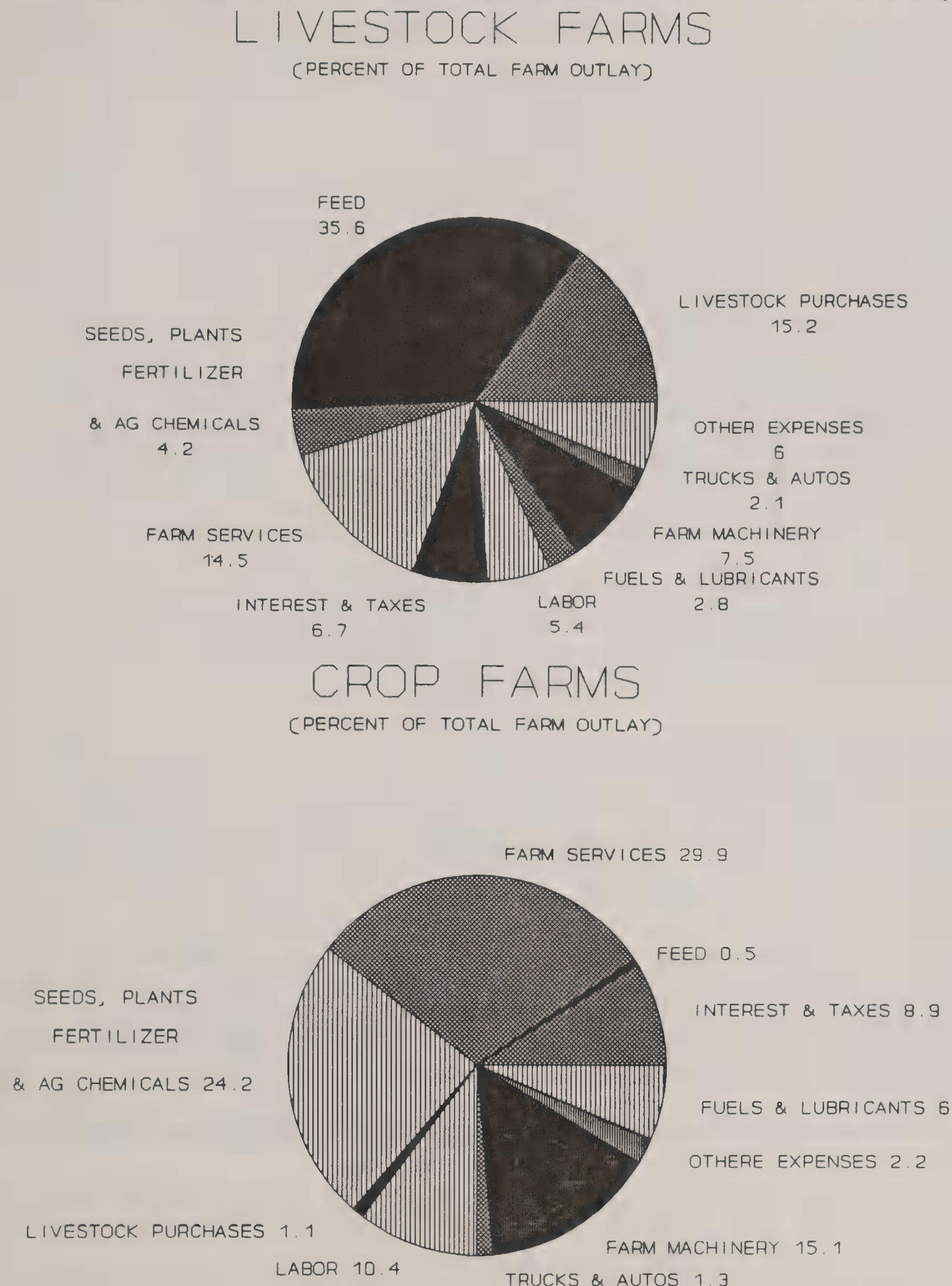
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	48	7	40	5	100
Economic class:					
$40,000 or more	60	22	11	7	100
Less than $40,000	44	4	48	5	100
Type of farm:					
Cash grain	51	22	16	11	100
All crops	53	19	19	9	100
Beef, hog, or sheep	43	2	51	4	100
All livestock or poultry	47	4	45	4	100
			Acres per farm		
Operating:					
Acres owned	190	130	120	110	160
Acres operated	370	600	210	330	320
			Years		
Operator age	56	41	56	48	54
			Dollars per farm		
Financial:					
Crop sales	54,700	131,900	4,700	20,300	39,100
Livestock sales	23,100	62,900	8,100	8,700	19,500
Other farm income	14,200	26,800	2,000	6,600	10,000
Gross cash farm income	92,000	221,600	14,800	35,500	68,600
Cash operating expenses	60,200	141,300	22,800	55,200	51,400
Net cash farm income	31,800	80,300	-8,000	-19,700	17,200
Nonfarm income	21,400	42,100	31,500	20,600	26,800
Total assets	384,200	306,800	279,000	182,500	326,700
Total debt	23,200	220,300	15,400	141,000	41,100
			Ratio		
Ratios:					
Debt/asset	0.06	0.72	0.06	0.77	0.13
Cash expenses/gross income	.65	.64	1.54	1.55	.75
Interest/gross income	.03	.07	.18	.27	.06

The ratio of expenses to gross income was highest for the negative income, high debt group (1.55), and lowest for the positive income, high debt group (0.64). The ratio of interest expense to gross income for farms in the weakest financial position was 0.27, indicating that more than one-fourth of their gross income paid interest expenses for borrowed capital. The remaining 60 percent of high debt farms earned the highest average net cash income ($80,300), a result of having the highest gross farm income and the lowest ratio of operating expenses to gross income of any group.

Delta farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 60 percent, than farms in the smaller economic class, 44 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had a larger proportion of operations in the most financially favorable position than did livestock farms. However, a larger percentage of crop farms were in a high debt position, placing a greater share of crop operations in the weakest financial position. A higher percentage of livestock operations had negative cash incomes. The overall financial performance of farms that specialized in the production of cash grains was weaker than for crop farms in general.

Figure 2--Delta Farm Production Expenditures by Farm Type



Farm production expenditures in the Delta region totaled $5.3 billion in 1987, up 11 percent from 1986 according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Delta region included the following States: AR, LA, and MS. Increased regional outlays for livestock and poultry purchases, feed, farm services, taxes, labor, farm supplies, farm and land improvements, farm machinery, and trucks and autos were partially offset by declines in other major expenses. Expenditures by livestock farms at $2.7 billion were 51 percent of the total regional expenses. Over one-half of the livestock farm expenses were for feed (36 percent) and livestock and poultry purchases (15 percent). Crop farm expenditures totaled $2.6 billion, 49 percent of the regional expenses. Major expense items were farm services (30 percent) and seeds, plants, fertilizer and chemicals (24 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Delta

Delta (AR, LA AND MS)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	2,597,315	2,680,279	5,277,594
Livestock and poultry	27,784	408,678	436,462
Feed	12,060	952,638	964,698
Farm services	777,487	389,196	1,166,683
Ag. chemicals and sprays	267,869	18,267	286,136
Fertilizer	225,568	79,495	305,063
Interest	208,512	144,422	352,934
Taxes (property and real estate)	21,653	35,635	57,288
Labor	268,923	144,331	413,254
Fuels and lubricants	167,378	74,725	242,103
Farm supplies (other)	15,593	40,758	56,351
Building and fencing (other)	14,536	98,479	113,015
Farm and land improvements (other)	15,730	19,658	35,388
Total farm machinery	392,833	200,499	593,332
Seeds	134,594	15,872	150,466
Trucks and autos	34,625	56,985	91,610
Other unallocated expenses	12,168	641	12,809

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

SOUTHERN PLAINS

The Southern Plains was estimated to represent 11 percent of all U.S. farms in 1987. There was four times as many livestock as crop farms. The most common livestock production specialty was beef, hog, or sheep (90 percent), while cash grain (38 percent) represented the largest proportion of crop specialties. Over 50 percent of farms had gross sales of less than $10,000 and only one in five were in the economic classes above $40,000. Unlike other regions, less than one-third of farms or ranches operated under 100 acres, while 14 percent operated 1,000 or more acres. Half owned all the land they operated. Full tenants represented 11 percent of farms and the remaining 40 percent were partial owners of the land they farmed in 1987. Ninety-two percent of farms were organized as individual operations, 2 percent as corporations, and 6 percent as partnerships.

Nineteen percent of total land operated in the Southern Plains was devoted to cropland, 75 percent to pasture, 6 percent was idle under Government programs, and the remainder was for summer fallow, woodlands, or some other use. Farm or ranch operators in the Southern Plains accounted for 9 percent of U.S. livestock sales and 4 percent of crop sales in 1987. The highest ranking crops, in terms of gross sales, were cotton (39 percent) and wheat (19 percent). Cattle accounted for over 80 percent of all livestock sales making it the most important livestock product. Milk and dairy products accounted for the next largest share at 12 percent. One in four farms participated in Government programs. These farms received 8 percent of U.S. payments. The typical farm operator was 55 years old and average working 30 hours per week on the farm. Fifty-five percent of farm operators indicated that farming was their primary occupation. Over 95 percent of farmers or ranchers and their households reported earning nonfarm incomes which represented 15 percent of U.S. farm operator off-farm earnings.

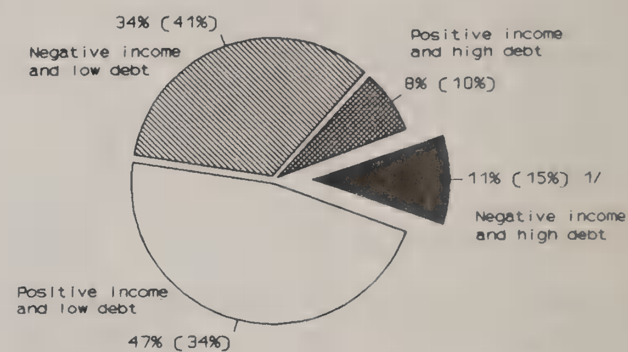
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: OKLAHOMA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF OKLAHOMA FARM OPERATORS SHOWED CONSIDERABLE IMPROVEMENT IN 1987, according to a survey conducted by the Oklahoma Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-seven percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 11 percent were classified in the weakest financial position. An additional 8 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 34 percent of Oklahoma farmers were in the most favorable financial situation, while 15 percent were classified in the weakest position.

Figure 1--Distribution of Oklahoma farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income: Low debt 2/	Positive income: High debt 3/	Negative income: Low debt	Negative income: High debt
	Percent of farms			
Texas	37	4	53	6
Southern Plains	40	4	49	7
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	OK	TX	Southern Plains	U.S.
		Acres per farm		
Acres operated 1/	490	780	700	450
		Dollars per farm		
Crop sales	7,300	18,400	15,600	28,900
+ Livestock sales	21,200	23,600	23,000	29,500
+ Other farm income	7,900	10,100	9,600	11,800
= Gross cash farm income	36,400	52,200	48,100	70,200
- Cash operating expenses	32,500	41,400	39,200	53,300
= Net cash farm income	3,800	10,700	9,000	16,900
Nonfarm income	31,500	36,400	35,200	24,900
Net worth	210,600	394,400	347,300	296,800
		Ratio		
Debt/asset ratio	0.18	0.08	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987, 55 percent of Oklahoma farms had a positive net cash farm income compared with 44 percent a year earlier. Average nonfarm income was nearly ten times greater that average net cash earnings from farming. Nonfarm income for Oklahoma farmers averaged $31,500, which was $6,600 higher than for all U.S. farm households. One in five farms had debts which exceeded 40 percent of assets which represents an improvement over last year when one in four farms were in this situation. However, the average debt/asset ratio was higher than both the regional and U.S. values.

The average farm size in Oklahoma was 490 acres, 55 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farms with positive incomes were the largest in terms of acreage. Generally, high debt operators were younger than operators with low debt/asset ratios. Average gross cash farm income ranged from $20,300 for negative income, low debt operations to $85,700 for farms with positive incomes and high debt.

Table 2--Average operating and financial characteristics of Oklahoma farms by net cash farm income and debt/asset ratio position

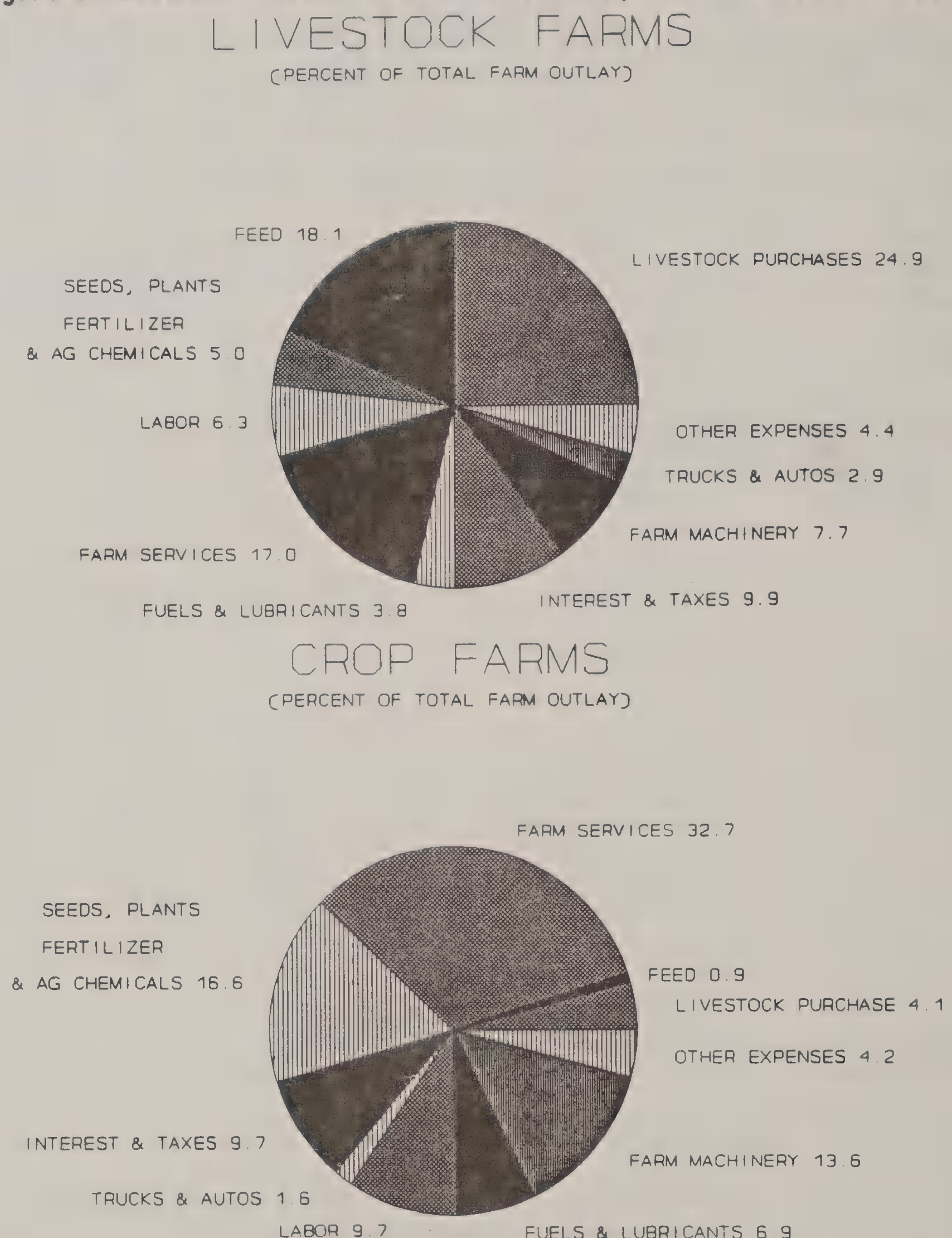
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	47	[illegible]	34	11	100
Economic class:					
$40,000 or more	58	17	19	6	100
Less than $40,000	44	5	39	12	100
Type of farm:					
Cash grain	56	23	16	5	100
All crops	53	20	21	6	100
Beef, hog, or sheep	40	5	42	13	100
All livestock or poultry	46	5	37	12	100
			Acres per farm		
Operating:					
Acres owned	300	290	250	150	270
Acres operated	480	930	450	360	490
Operator age	58	41	51	44	53
			Dollars per farm		
Financial:					
Crop sales	8,500	22,600	3,400	3,300	7,300
Livestock sales	26,000	42,000	12,300	13,600	21,200
Other farm income	9,200	21,100	4,500	3,700	7,900
Gross cash farm income	43,700	85,700	20,300	20,700	36,400
Cash operating expenses	29,200	64,500	31,000	29,600	32,500
Net cash farm income	14,500	21,200	-10,800	-8,900	3,800
Nonfarm income	31,200	13,600	33,600	38,600	31,500
Total assets	304,800	256,500	225,800	144,500	256,900
Total debt	21,400	178,700	29,700	116,600	46,300
			Ratio		
Ratios:					
Debt/asset	0.07	0.70	0.13	0.81	0.18
Cash expenses/gross income	.67	.75	1.53	1.43	.89
Interest/gross income	.05	.15	.16	.36	.11

The ratio of expenses to gross income was highest for the negative income, high debt group (1.53), and lowest for the positive income, high debt group (0.67). The ratio of interest expense to gross income for farms in the weakest financial position was 0.36, indicating that more than one-third of their gross income paid interest expenses for borrowed capital. The remaining 40 percent of high debt farms earned the highest average net cash income ($21,200), a result of having the highest gross farm income and one of the lowest operating expenses to gross income ratios.

Oklahoma farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 58 percent, than farms in the smaller economic class, 44 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had a larger proportion of operations in the most financially favorable position than did livestock farms and a lower percentage classified in the negative income high debt category. The overall financial performance of farms that specialized in the production of cash grains was stronger than for crop farms in general.

Figure 2--Southern Plains Farm Production Expenditures by Farm Type



Farm production expenditures in the Southern Plains region totaled $8.4 billion in 1987, down 6.2 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Southern Plains region included the following States: OK and TX. Livestock and poultry purchases and farm services were the only major expense items that increased for the region. Expenditures by livestock farms at $5.8 billion were 69 percent of the total regional expenses. Major expense items on livestock farms were livestock and poultry purchases (25 percent), feed (18 percent), and farm services (17 percent). Crop farm expenditures totaled $2.6 billion, 31 percent of the regional expenses. One-half of the crop farm expenses in these States were for farm services (33 percent) and seeds, plants, fertilizer and chemicals (17 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Southern Plains

Southern Plains (OK AND TX)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	2,619,533	5,768,126	8,387,659
Livestock and poultry	108,376	1,435,268	1,543,644
Feed	24,870	1,042,303	1,067,173
Farm services	855,345	980,816	1,836,161
Ag. chemicals and sprays	117,567	43,828	161,395
Fertilizer	208,877	185,332	394,209
Interest	207,992	457,371	665,363
Taxes (property and real estate)	45,393	113,820	159,213
Labor	253,153	365,323	618,476
Fuels and lubricants	179,684	217,201	396,885
Farm supplies (other)	45,215	50,535	95,750
Building and fencing (other)	14,121	149,397	163,518
Farm and land improvements (other)	18,092	40,866	58,958
Total farm machinery	357,078	445,151	802,229
Seeds	108,566	63,136	171,702
Trucks and autos	42,867	165,835	208,702
Other unallocated expenses	32,338	11,943	44,281

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

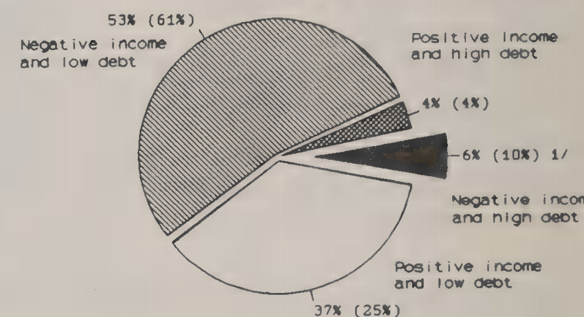
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: TEXAS

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

ALTHOUGH FINANCIAL DIFFICULTIES PERSIST FOR SOME FARMS, THE OVERALL FINANCIAL POSITION OF TEXAS FARM OPERATORS SHOWED CONSIDERABLE IMPROVEMENT IN 1987, according to a survey conducted by the Texas Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-seven percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 6 percent were classified in the weakest financial position. An additional 4 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. A year ago only one in four of Texas farmers were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of Texas farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Oklahoma	47	8	34	11
Southern Plains	40	4	49	7
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	OK	TX	Southern Plains	U.S.
		Acres per farm		
Acres operated 1/	490	780	700	450
		Dollars per farm		
Crop sales	7,300	18,400	15,600	28,900
+ Livestock sales	21,200	23,600	23,000	29,500
+ Other farm income	7,900	10,100	9,600	11,800
= Gross cash farm income	36,400	52,200	48,100	70,200
- Cash operating expenses	32,500	41,400	39,200	53,300
= Net cash farm income	3,800	10,700	9,000	16,900
Nonfarm income	31,500	36,400	35,200	24,900
Net worth	210,600	394,400	347,300	296,800
		Ratio		
Debt/asset ratio	0.18	0.08	0.10	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987, nearly 60 percent of Texas farms had negative net cash farm incomes compared with 71 percent a year earlier. The majority of farms with negative incomes had low debt levels. Average nonfarm income was three times greater than average net cash earnings from farming. One in ten farms had debts that represented over 40 percent of assets, which was an improvement over 1986 when 14 percent of farms were in this position. The average debt/asset ratio of 0.08 was the lowest in the region and well below the U.S. value of 0.15.

The average farm size in Texas was 780 acres, 55 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. High debt farms with positive incomes were the largest in terms of acreage. Generally, high debt operators were younger than operators with low debt/asset ratios. Average gross cash farm income ranged from $13,800 for negative income, low debt operations to $223,600 for farms with positive incomes and high debt.

The ratio of expenses to gross income was highest for the negative income, low debt group (1.74), and lowest for the positive income, high debt group (0.58). The ratio of interest expense to gross income for farms in the weakest financial position was 0.44, indicating that almost half of their gross income paid interest expenses for borrowed capital. The remaining 40 percent of high debt farms earned the highest average net cash income ($69,000), a result of having the highest gross farm income and one of the lowest operating expenses to gross income ratios.

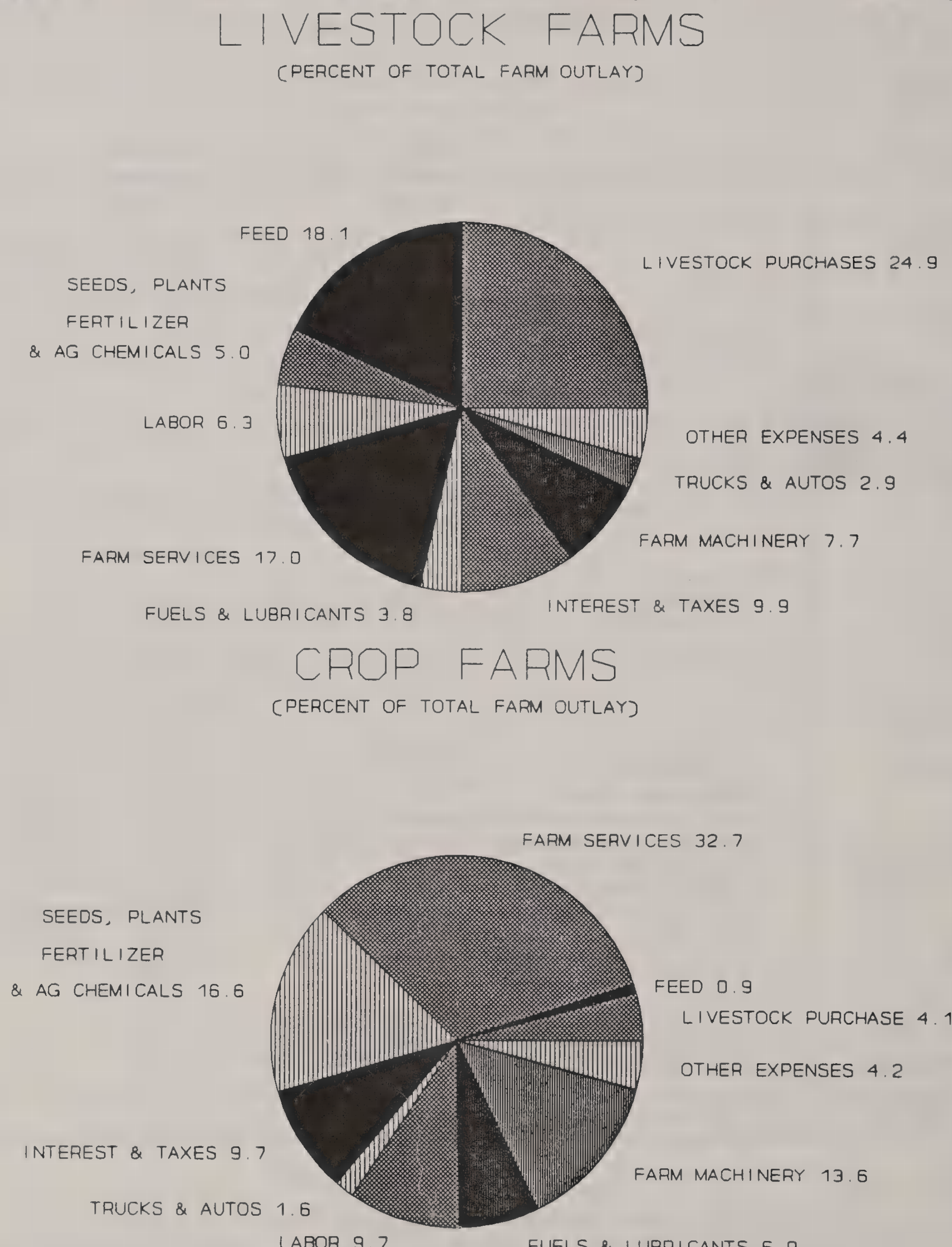
Table 2--Average operating and financial characteristics of Texas farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	37	4	54	6	100
Economic class:					
$40,000 or more	70	12	13	4	100
Less than $40,000	29	1	64	6	100
Type of farm:					
Cash grain	66	12	14	7	100
All crops	47	11	35	8	100
Beef, hog, or sheep	33	1	60	5	100
All livestock or poultry	34	2	59	5	100
			Acres per farm		
Operating:					
Acres owned	630	390	320	270	430
Acres operated	1,150	1,790	480	600	780
Operator age	58	46	56	42	56
			Dollars per farm		
Financial:					
Crop sales	33,300	123,600	2,500	6,300	18,400
Livestock sales	42,700	55,600	9,600	12,300	23,600
Other farm income	19,800	44,400	1,600	6,500	10,100
Gross cash farm income	95,900	223,600	13,800	25,200	52,200
Cash operating expenses	55,900	154,600	23,900	42,400	41,400
Net cash farm income	39,900	69,000	-10,200	-17,200	10,700
Nonfarm income	23,100	19,600	44,700	55,400	36,400
Total assets	616,400	327,900	336,000	182,700	430,600
Total debt	26,700	232,600	18,800	140,500	36,200
			Ratio		
Ratios:					
Debt/asset	0.04	0.71	0.06	0.77	0.08
Cash expenses/gross income	.58	.69	1.74	1.68	.79
Interest/gross income	.03	.08	.15	.44	.07

Texas farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 70 percent, than farms in the smaller economic class, 29 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Crop farms had a larger proportion of operations in the most financially favorable position than did livestock farms. The overall financial performance of farms that specialized in the production of cash grains was stronger than for crop farms in general. A higher percentage of livestock farms had negative net cash incomes than did crop farms.

Figure 2--Southern Plains Farm Production Expenditures by Farm Type



Farm production expenditures in the Southern Plains region totaled $8.4 billion in 1987, down 6.2 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Southern Plains region included the following States: OK and TX. Livestock and poultry purchases and farm services were the only major expense items that increased for the region. Expenditures by livestock farms at $5.8 billion were 69 percent of the total regional expenses. Major expense items on livestock farms were livestock and poultry purchases (25 percent), feed (18 percent), and farm services (17 percent). Crop farm expenditures totaled $2.6 billion, 31 percent of the regional expenses. One-half of the crop farm expenses in these States were for farm services (33 percent) and seeds, plants, fertilizer and chemicals (17 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Southern Plains

Southern Plains (OK AND TX)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	2,619,533	5,768,126	8,387,659
Livestock and poultry	108,376	1,435,268	1,543,644
Feed	24,870	1,042,303	1,067,173
Farm services	855,345	980,816	1,836,161
Ag. chemicals and sprays	117,567	43,828	161,395
Fertilizer	208,877	185,332	394,209
Interest	207,992	457,371	665,363
Taxes (property and real estate)	45,393	113,820	159,213
Labor	253,153	365,323	618,476
Fuels and lubricants	179,684	217,201	396,885
Farm supplies (other)	45,215	50,535	95,750
Building and fencing (other)	14,121	149,397	163,518
Farm and land improvements (other)	18,092	40,866	58,958
Total farm machinery	357,078	445,151	802,229
Seeds	108,566	63,136	171,702
Trucks and autos	42,867	165,835	208,702
Other unallocated expenses	32,338	11,943	44,281

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

MOUNTAIN

According to the 1987 FCRS, farms and ranches in the Mountain region represented 6 percent of the U.S. total. The majority (60 percent) of farms were considered livestock operations with the most common being beef, hog, and sheep producers. Other field crops, and cash grains represented the majority of crop farms at 56 and 36 percent, respectively. Sixty-four percent of farms had gross sales below $40,000 which was similar to the U.S. distribution. Thirty-four percent of farms operated less than 100 acres, while at the other extreme, one in four had farms or ranches of at least 1,000 acres. Nearly half of farm or ranch operators owned all of the land they farmed. Full tenants represented 9 percent of farms and the remaining 43 percent were partial owners of the total land they farmed in 1987. The Mountain region had the highest concentration of both corporations (5 percent) and partnerships (9 percent) resulting in the lowest percentage of individually organized farms of any region.

Eight percent of total land operated in the Mountain region was devoted to cropland (the lowest of any region), 61 percent to pasture (the highest of any region), 3 percent was idle under Government programs, and the remainder went for summer fallow, woodlands or some other use. Farm or ranch operators in Mountain region accounted for 7 percent of U.S. livestock sales and 9 percent of total crop sales in 1987. The highest ranking crops, in terms of gross sales, were sugarbeets and other specialty crops (30 percent), wheat (21 percent), and cotton (14 percent). Cattle and milk and dairy products were the predominant livestock commodities accounting for over 85 percent of all livestock sales. One-third of farms participated in Government programs, representing 7 percent of total payments. The typical farm or ranch operator in the Mountain region was 55 years old and spent 28 hours per week working on the farm. Nearly 60 percent of survey respondents indicated that farming was their primary occupation in 1987. More than 85 percent of farmers and their households reported earning nonfarm income, representing 6 percent of U.S. farm operator household off-farm income.

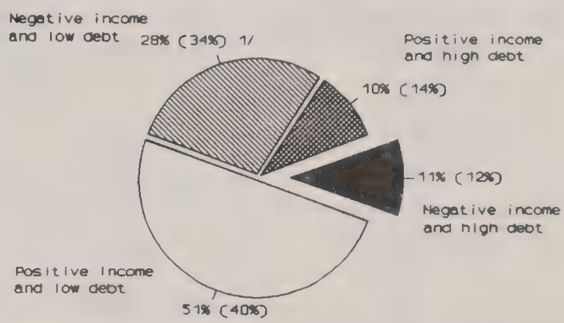
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: COLORADO

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF COLORADO FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Colorado Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 50 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 11 percent experienced financial difficulties. This was slightly higher than both the regional and U.S. values. An additional 10 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 40 percent of Colorado farmers were in the most favorable financial situation while 12 percent were classified in the weakest position.

Figure 1--Distribution of Colorado farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
NV, AZ, NM	27	2	57	14
MT, WY, UT, ID	49	8	36	7
Mountain	45	7	38	10
U S	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	CO	NV, AZ, and NM	MT, WY, UT, and ID	Mountain States	U.S.
			Acres per farm		
Acres operated 1/	1,560	2,440	1,090	1,460	450
			Dollars per farm		
Crop sales	34,900	53,700	29,700	35,500	28,900
+ Livestock sales	42,500	39,300	33,200	36,300	29,500
+ Other farm income	17,700	17,400	11,100	13,700	11,800
= Gross cash farm income	95,100	110,400	74,000	85,500	70,200
- Cash operating expenses	82,200	106,600	54,500	70,500	53,300
= Net cash farm income	12,900	3,800	19,600	15,100	16,900
Nonfarm income	19,500	32,900	20,800	22,900	24,900
Net worth	441,600	633,700	369,300	436,500	296,800
			Ratio		
Debt/asset ratio	0.22	0.11	0.16	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Like in other parts of the region, average nonfarm income was greater than average net cash earnings from farming. Nonfarm income for Colorado averaged $19,500, which was $5,400 less than for all U.S. farm households and the lowest of the areas in the region. The State's net cash income averaged $12,900, below both the Mountain region and the national averages. Twenty-one percent of Colorado farms had high debt levels, the highest in the region, and six percentage points greater than the U.S. value.

The average farm or ranch in Colorado operated 1,560 acres, 69 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farmers and ranchers in the weakest financial position were generally younger than the operators of other farms. The average gross cash farm income was $95,100 and average net cash income was $12,900. Farms with positive incomes and high debt had the highest gross farm income at $233,100 per farm. Average nonfarm income ranged from $8,000 for operations with positive incomes and high debt to $37,800 for farms with negative incomes and high debt. For farms with low debt but negative income, livestock sales accounted for a larger share of total sales than for the positive income farms.

Table 2--Average operating and financial characteristics of Colorado farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	51	10	28	11	100
Economic class:					
$40,000 or more	73	10	10	7	100
Less than $40,000	29	8	47	15	100
Type of farm:					
Cash grain	55	18	d	d	100
All crops	52	12	27	9	100
Beef, hog, or sheep	47	d	35	d	100
All livestock or poultry	51	7	30	13	100
			Acres per farm		
Operating:					
Acres owned	1,000	790	310	d	1,070
Acres operated	1,640	1,910	480	d	1,560
			Years		
Operator age	49	50	56	40	50
			Dollars per farm		
Financial:					
Crop sales	37,500	82,400	11,900	d	34,900
Livestock sales	42,300	107,600	30,700	20,100	42,500
Other farm income	17,600	43,100	4,700	d	17,700
Gross cash farm income	97,400	233,100	47,300	d	95,100
Cash operating expenses	57,900	175,500	73,100	d	82,200
Net cash farm income	39,500	57,600	-25,800	d	12,900
Nonfarm income	15,600	8,000	23,100	37,800	19,500
Total assets	469,400	514,300	618,100	d	568,200
Total debt	45,200	368,000	52,100	d	126,700
			Ratio		
Ratios:					
Debt to asset	0.10	0.72	0.08	0.52	0.22
Cash expenses/gross income	.59	.75	1.55	1.51	.86
Interest/gross income	.06	.11	.14	.62	.14

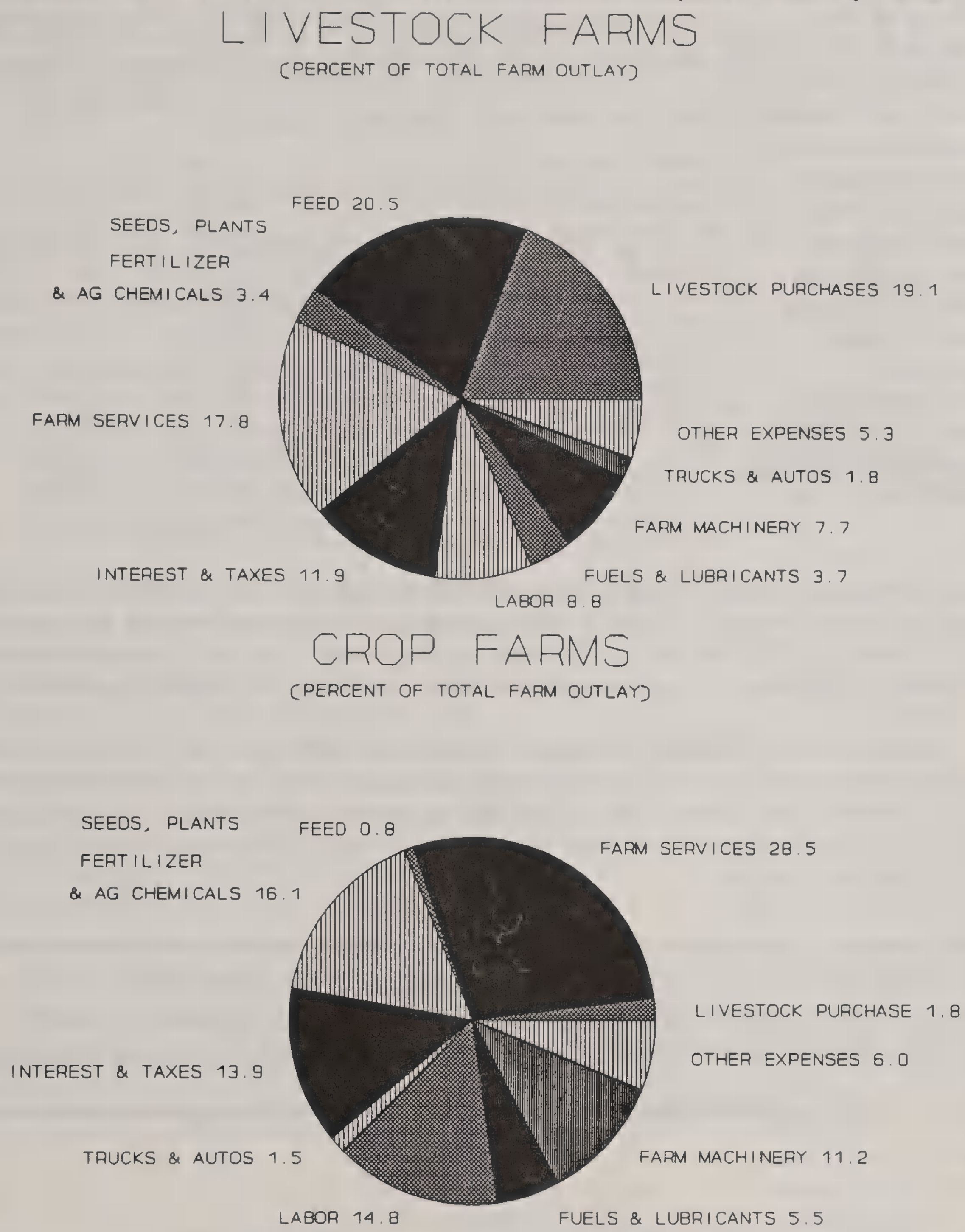
d = Insufficient data for disclosure.

The ratio of cash operating expenses to gross cash income was highest for the negative income, low debt group (1.55), and lowest for the positive income, low debt group (0.59). The ratio of interest expense to gross income for the negative income, high debt group was 0.62, indicating that nearly two-thirds of their gross income paid interest expenses for borrowed capital.

Colorado farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 73 percent, than were farms in the smaller economic class, 29 percent. Financial difficulties for farms in the smallest economic class were more likely a result of negative farm incomes rather than high debt levels.

Cash grain farms had the largest proportion of farms which were in the most financially favorable position. Although beef, hog, and sheep operations had relatively low debt levels, many of them had negative farm incomes in 1987; 35 percent had low debt and negative farm incomes. Comparing crop and livestock farms with high debt, a greater share of livestock producers had negative incomes, placing them in a relatively more vulnerable financial position.

Figure 2--Mountain States Farm Production Expenditures by Farm Type



Farm production expenditures in the Mountain region totaled $8.3 billion in 1987, up 6 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. Lower regional expenditures for livestock and poultry and interest were offset by increases in all other major expenses. Expenditures by crop farms at $4.4 billion were 52 percent of the total regional expenses. Major expense items on crop farms were farm services (29 percent), seeds, plants, fertilizer and chemicals (16 percent), labor (15 percent) and interest and taxes (14 percent). Livestock farm expenditures totaled $4.0 billion, 48 percent of the regional expenses. Over one-half of the livestock farm expenses were for feed (21 percent), livestock and poultry purchases (19 percent), and farm services (18 percent). Major expense items on crop farms were farm services and seeds, plants, fertilizer and chemicals.

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Mountain States

Mountain (AZ, CO, ID, MT, NV, NM, UT AND WY)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,350,745	3,959,988	8,310,733
Livestock and poultry	79,077	754,642	833,719
Feed	27,917	811,283	839,200
Farm services	1,240,826	703,098	1,943,924
Ag chemicals and sprays	189,593	40,507	230,100
Fertilizer	333,763	62,204	395,967
Interest	493,389	374,213	867,602
Taxes (property and real estate)	110,656	97,053	207,709
Labor	644,419	348,026	992,445
Fuels and lubricants	240,443	148,122	388,565
Farm supplies (other)	87,777	59,020	146,797
Building and fencing (other)	50,472	81,610	132,082
Farm and land improvements (other)	58,932	51,587	110,519
Total farm machinery	485,517	304,295	789,812
Seeds	178,837	32,817	211,654
Trucks and autos	66,071	71,283	137,354
Other unallocated expenses	63,057	20,228	83,285

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

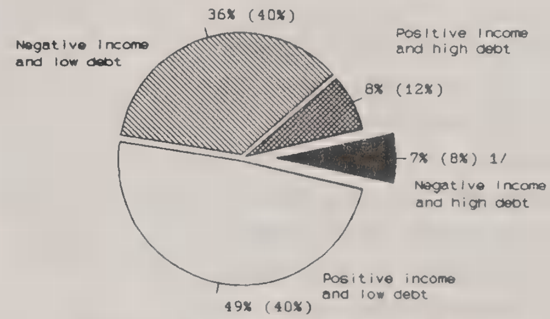
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: MONTANA, WYOMING, UTAH, IDAHO

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

FINANCIAL DIFFICULTIES CONTINUED FOR SOME FARMS AND RANCHES IN THE NORTHERN MOUNTAIN REGION (MONTANA, WYOMING, UTAH, AND IDAHO) DURING 1987, according to a survey conducted by each State's Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-nine percent of farms were in the most favorable financial situation with positive net cash farm incomes and low relative debt levels. At the other extreme, 7 percent experienced financial problems. An additional 8 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 40 percent of operators in the region were in the strongest financial position, while 8 percent were classified in the weakest position.

Figure 1--Distribution of Montana, Wyoming, Utah, and Idaho farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Colorado	51	10	28	11
NV, AZ, NM	27	2	57	14
Mountain	45	7	38	10
U S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40

Table 1--Selected average operating and financial characteristics

Item	CO	NV, AZ, and NM	MT,WY,UT, and ID	Mountain States	U.S.
			Acres per farm		
Acres operated 1/	1,560	2,440	1,090	1,460	450
			Dollars per farm		
Crop sales	34,900	53,700	29,700	35,500	28,900
+ Livestock sales	42,500	39,300	33,200	36,300	29,500
+ Other farm income	17,700	17,400	11,100	13,700	11,800
= Gross cash farm income	95,100	110,400	74,000	85,500	70,200
- Cash operating expenses	82,200	106,600	54,500	70,500	53,300
= Net cash farm income	12,900	3,800	19,600	15,100	16,900
Nonfarm income	19,500	32,900	20,800	22,900	24,900
Net worth	441,600	633,700	369,300	436,500	296,800
			Ratio		
Debt/asset ratio	0.22	0.11	0.16	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Like in other areas of the Mountain region, average nonfarm income was greater than average net cash earnings from farming. Nonfarm income averaged $20,800, $4,100 less that for all U.S. farm households and $2,100 less than for all the region's households. Net cash income averaged $19,600, above both the regional and the national averages. Fifteen percent of northern Mountain region farms had high debt levels, mirroring the U.S. distribution and two percentage points below the Mountain region value.

The average farm size was 1,094 acres, 68 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned 71 percent of total acres operated. Farmers and ranchers with the higher debt levels, regardless of income position, were generally younger than operators of other farms. The average gross cash farm income was $74,000 and average net cash income was $19,600 in 1987. The ratio of expenses to gross income was highest for the negative income, low debt group (1.42), and lowest for the positive income, low debt group (0.63). Farms in the least favorable financial position had the highest nonfarm income. The ratio of interest expense to gross cash income ranged from 0.06 to 0.24.

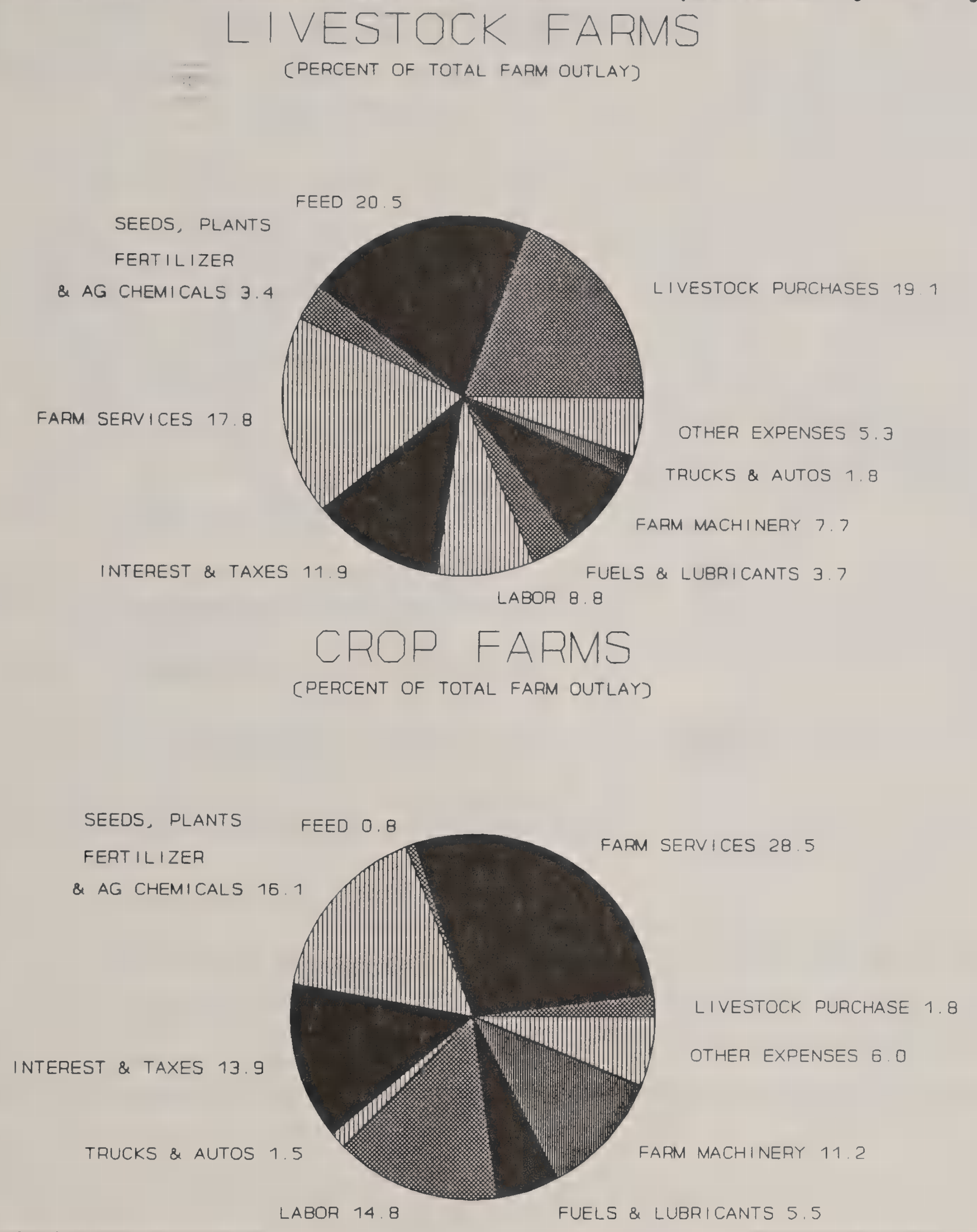
Table 2--Average operating and financial characteristics for Montana, Wyoming, Utah, and Idaho farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	49	8	36	7	100
Economic class:					
$40,000 or more	68	17	9	6	100
Less than $40,000	39	3	49	9	100
Type of farm:					
Cash grain	62	15	18	5	100
All crops	43	11	38	8	100
Beef, hog, or sheep	56	4	34	7	100
All livestock or poultry	53	5	34	7	100
			Acres per farm		
Operating:					
Acres owned	1,121	1,316	212	249	745
Acres operated	1,640	1,838	341	351	1,094
			Years		
Operator age	55	44	53	47	53
			Dollars per farm		
Financial:					
Crop sales	39,300	98,900	4,800	13,800	29,700
Livestock sales	46,000	61,700	10,600	28,300	33,200
Other farm income	16,500	22,600	2,200	7,100	11,100
Gross cash farm income	101,800	183,200	17,600	49,200	74,000
Cash operating expenses	64,500	116,400	25,000	64,800	54,500
Net cash farm income	37,300	66,900	-7,500	-15,500	19,600
Nonfarm income	18,000	8,200	23,600	37,800	20,800
Total assets	564,200	594,500	280,400	248,900	441,200
Total debt	45,500	364,800	27,300	153,200	71,900
			Ratio		
Ratios:					
Debt to asset	0.08	0.61	0.10	0.62	0.16
Cash expenses/gross income	.63	.64	1.42	1.32	.74
Interest/gross income	.06	.14	.19	.24	.09

Northern Mountain farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 68 percent, than farms in the smaller economic class, 39 percent. Farms in the smallest economic class were less likely to have high debt positions, but were more likely to have negative farm incomes.

Livestock and crop farms had a similar proportion with negative incomes and high debt, although a greater percentage of livestock farms were in the strongest financial position. Farms that specialized on the production of cash grains had a larger proportion of operations which were in the most financially favorable position, when compared with crop farms in general. The financial position of beef, hog, and sheep operations was similar to that of all livestock producers.

Figure 2--Mountain States Farm Production Expenditures by Farm Type



Farm production expenditures in the Mountain region totaled $8.3 billion in 1987, up 6 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. Lower regional expenditures for livestock and poultry and interest were offset by increases in all other major expenses. Expenditures by crop farms at $4.4 billion were 52 percent of the total regional expenses. Major expense items on crop farms were farm services (29 percent), seeds, plants, fertilizer and chemicals (16 percent), labor (15 percent) and interest and taxes (14 percent). Livestock farm expenditures totaled $4.0 billion, 48 percent of the regional expenses. Over one-half of the livestock farm expenses were for feed (21 percent), livestock and poultry purchases (19 percent), and farm services (18 percent). Major expense items on crop farms were farm services and seeds, plants, fertilizer and chemicals.

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Mountain States

Mountain (AZ, CO, ID, MT, NV, NM, UT AND WY)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,350,745	3,959,988	8,310,733
Livestock and poultry	79,077	754,642	833,719
Feed	27,917	811,283	839,200
Farm services	1,240,826	703,098	1,943,924
Ag chemicals and sprays	189,593	40,507	230,100
Fertilizer	333,763	62,204	395,967
Interest	493,389	374,213	867,602
Taxes (property and real estate)	110,656	97,053	207,709
Labor	644,419	348,026	992,445
Fuels and lubricants	240,443	148,122	388,565
Farm supplies (other)	87,777	59,020	146,797
Building and fencing (other)	50,472	81,610	132,082
Farm and land improvements (other)	58,932	51,587	110,519
Total farm machinery	485,517	304,295	789,812
Seeds	178,837	32,817	211,654
Trucks and autos	66,071	71,283	137,354
Other unallocated expenses	63,057	20,228	83,285

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

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REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

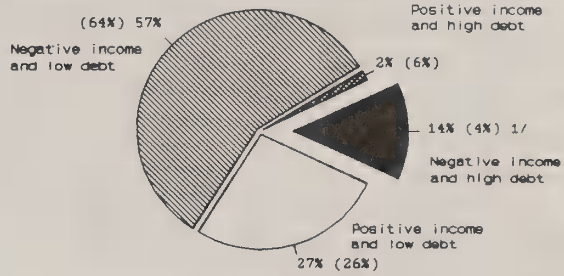
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: NEVADA, ARIZONA, NEW MEXICO

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

FINANCIAL STRESS PERSISTED IN THE SOUTHERN MOUNTAIN REGION (NEVADA, ARIZONA, AND NEW MEXICO) DURING 1987, according to a survey conducted by each State's Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Twenty-seven percent of farms were in the most favorable financial situation, having positive net incomes and low relative debt levels. At the other extreme, 14 percent experienced financial difficulties. An additional 2 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that 26 percent of operators in the region were in the strongest financial position, while 4 percent were classified in the weakest position.

Figure 1--Distribution of Nevada, Arizona, and New Mexico farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income: Low debt 2/	Positive income: High debt 3/	Negative income: Low debt	Negative income: High debt
	Percent of farms			
Colorado	51	10	28	11
MT,WY,UT,ID	49	8	36	7
Mountain	45	7	38	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40

Table 1--Selected average operating and financial characteristics

Item	CO	NV, AZ, and NM	MT,WT,UT, and ID	Mountain States	U.S.
			Acres per farm		
Acres operated 1/	1,560	2,440	1,090	1,460	450
			Dollars per farm		
Crop sales	34,900	53,700	29,700	35,500	28,900
+ Livestock sales	42,500	39,300	33,200	36,300	29,500
+ Other farm income	17,700	17,400	11,100	13,700	11,800
= Gross cash farm income	95,100	110,400	74,000	85,500	70,200
- Cash operating expenses	82,200	106,600	54,500	70,500	53,300
= Net cash farm income	12,900	3,800	19,600	15,100	16,900
Nonfarm income	19,500	32,900	20,800	22,900	24,900
Net worth	441,600	633,700	369,300	436,500	296,800
			Ratio		
Debt/asset ratio	0.22	0.11	0.16	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Unlike other areas of the region, average crop sales were greater than livestock sales. Nonfarm income averaged $32,900, which was $8,000 more that for all U.S. farm households, and the highest in the region. Net cash income averaged $3,800, well below both the regional and the national averages. Average net worth of $633,700 was twice the U.S. average and highest in the region. The average debt/asset ratio of 0.11 was the lowest among areas within the Mountain region and below the 0.15 national average.

The average farm size in Nevada, Arizona, and New Mexico was 2,440 acres, 63 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farmers and ranchers with higher debt levels and positive incomes were generally younger than operators of other farms. Positive income, high debt farms had the highest average gross cash income, at $921,500. These farms also had the lowest ratio of cash expenses to gross cash income (0.70), while the highest occurred for the negative income, low debt group (1.44). Farms in the most favorable financial position had the highest average nonfarm income, at $39,900. The ratio of interest expense to gross cash income for both groups of farms with negative incomes was 0.11, indicating that 11 percent of their gross income paid interest expenses for borrowed capital.

Table 2--Average operating and financial characteristics for Nevada, Arizona, and New Mexico farms by net cash farm income and debt/asset ratio position

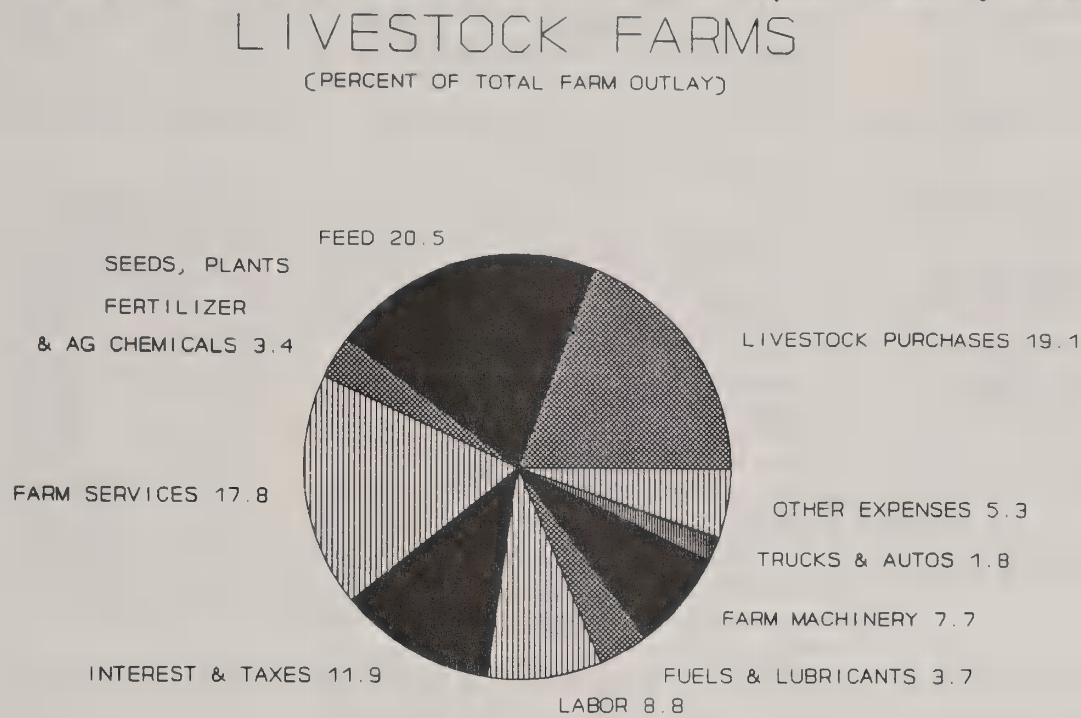
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	27	2	57	14	100
Economic class:					
$40,000 or more	62	5	22	10	100
Less than $40,000	13	0	72	15	100
Type of farm:					
Cotton	41	12	11	36	100
All crops	31	3	40	26	100
Beef, hog, or sheep	28	0	70	2	100
All livestock or poultry	25	1	67	8	100
			Acres per farm		
Operating					
Acres owned	3,690	1,390	820	d	1,530
Acres operated	4,710	3,230	1,790	d	2,440
			Years		
Operator age	52	42	53	51	52
			Dollars per farm		
Financial:					
Crop sales	82,400	378,800	16,200	d	53,700
Livestock sales	79,600	454,800	14,500	d	39,300
Other farm income	23,000	87,900	4,000	d	17,400
Gross cash farm income	185,000	921,500	34,700	d	110,400
Cash operating expenses	129,400	733,400	49,700	d	106,600
Net cash farm income	55,700	188,100	-15,100	d	3,800
Nonfarm income	39,900	17,300	34,500	14,500	32,900
Total assets	1,449,800	1,485,300	448,100	284,300	710,000
Total debt	77,400	993,100	27,300	178,400	76,200
			Ratio		
Ratios:					
Debt to asset	0.05	0.67	0.06	0.63	0.11
Cash expenses/gross income	.70	.80	1.44	1.20	.97
Interest/gross income	.05	.10	.11	.11	.08

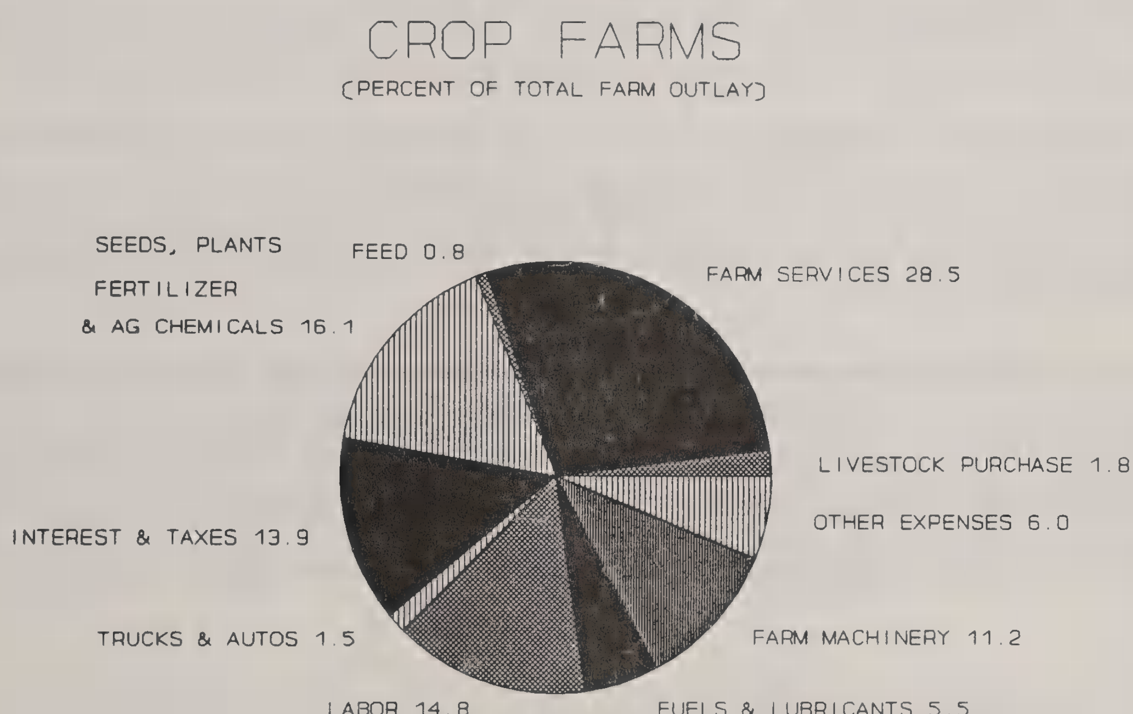
d = Insufficient data for disclosure.

Farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 62 percent, than farms in the smaller economic class, 13 percent. Financial difficulties for farms in the smallest economic class were more likely a result of negative farm incomes rather than high debt levels.

More than half of both crop and livestock farms had negative cash incomes at the end of 1987, although many of these farms may be holding inventories for future sale. A substantially higher portion of crop farms with negative incomes had high debt levels, placing them in a more vulnerable financial situation relative to the livestock farms with negative incomes. The financial performance of cotton farms was not typical of the performance of crop farms in general. A larger proportion of farms that specialized in cotton production were in both the strongest and weakest financial positions. Compared to all livestock farms, beef, hog, and sheep operations had a smaller proportion of farms with negative incomes and high debt and a slightly higher percentage in the most favorable financial position.

Figure 2--Mountain States Farm Production Expenditures by Farm Type





Farm production expenditures in the Mountain region totaled $8.3 billion in 1987, up 6 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. Lower regional expenditures for livestock and poultry and interest were offset by increases in all other major expenses. Expenditures by crop farms at $4.4 billion were 52 percent of the total regional expenses. Major expense items on crop farms were farm services (29 percent), seeds, plants, fertilizer and chemicals (16 percent), labor (15 percent) and interest and taxes (14 percent). Livestock farm expenditures totaled $4.0 billion, 48 percent of the regional expenses. Over one-half of the livestock farm expenses were for feed (21 percent), livestock and poultry purchases (19 percent), and farm services (18 percent). Major expense items on crop farms were farm services and seeds, plants, fertilizer and chemicals.

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by type of farm, Mountain States

Mountain (AZ, CO, ID, MT, NV, NM, UT AND WY)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	4,350,745	3,959,988	8,310,733
Livestock and poultry	79,077	754,642	833,719
Feed	27,917	811,283	839,200
Farm services	1,240,826	703,098	1,943,924
Ag chemicals and sprays	189,593	40,507	230,100
Fertilizer	333,763	62,204	395,967
Interest	493,389	374,213	867,602
Taxes (property and real estate)	110,656	97,053	207,709
Labor	644,419	348,026	992,445
Fuels and lubricants	240,443	148,122	388,565
Farm supplies (other)	87,777	59,020	146,797
Building and fencing (other)	50,472	81,610	132,082
Farm and land improvements (other)	58,932	51,587	110,519
Total farm machinery	485,517	304,295	789,812
Seeds	178,837	32,817	211,654
Trucks and autos	66,071	71,283	137,354
Other unallocated expenses	63,057	20,228	83,285

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

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PACIFIC

The Pacific region in 1987 represented 8 percent of all U.S. farms. The most common production specialties were vegetable, fruit, or nut (33 percent) and beef, hog, or sheep operations (28 percent). Nearly one in four farms had gross sales below $40,000, but the Pacific region had the largest concentration of farms with more than $500,000 in gross sales at 5 percent. Over 70 percent of farms or ranches were less than 100 acres in size, while 7 percent operated at least 1,000 acres. Seventy-two percent of farm or ranch operators owned all of the land they operated. Full tenants represented 11 percent of farms and the remaining 17 percent were partial owners of the land they farmed in 1987. Eighty-seven percent of farms or ranches were organized as individual operations, 3 percent as corporations, and 9 percent as partnerships.

Fifteen percent of total land operated in the Pacific region was devoted to cropland, 48 percent to pasture, 3 percent was idle under Government programs, and the remainder went for summer fallow, woodlands, or some other use. Farm or ranch operators in the Pacific region accounted for 8 percent of livestock sales and 22 percent of total crop sales. The highest ranking crops, in terms of gross sales, were noncitrus fruits and nuts (31 percent), vegetables (17 percent), and nursery and greenhouse items (12 percent). Milk and dairy products and cattle were the predominant livestock commodities at 70 and 20 percent, respectively. Eleven percent of farms participated in Government programs, representing 4 percent of total payments. The typical farm or ranch operator was 53 years old and averaged working 33 hours per week on the farm. Half of all farm operators indicated that farming was their primary occupation. Nearly 90 percent reported earning nonfarm income which represented 10 percent of total farm operators household off-farm earnings.

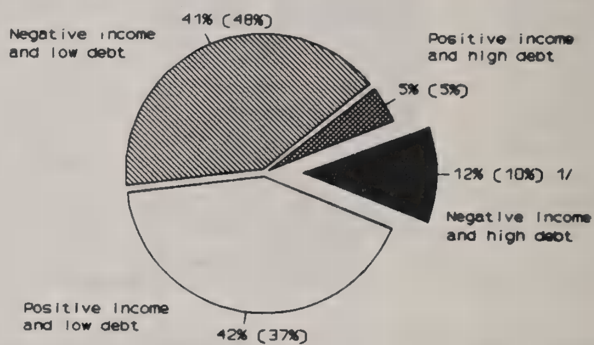
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: CALIFORNIA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

FINANCIAL DIFFICULTIES CONTINUED FOR SOME CALIFORNIA FARMS DURING 1987, according to a survey conducted by the California Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Forty-two percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 12 percent were classified in the weakest financial position. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 37 percent of California farmers were in the most favorable financial situation, while 10 percent were classified in the weakest position.

Figure 1--Distribution of California farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
Washington	41	7	43	9
WA, OR, CA	39	5	46	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	CA	WA	Pacific	U.S.
		Acres per farm		
Acres operated 1/	240	350	330	450
		Dollars per farm		
Crop sales	99,900	47,900	68,200	28,900
+ Livestock sales	40,300	25,900	30,000	29,500
+ Other farm income	11,100	13,400	10,100	11,800
= Gross cash farm income	151,300	87,200	108,300	70,200
- Cash operating expenses	127,700	64,400	88,400	53,300
= Net cash farm income	23,600	22,700	19,900	16,900
Nonfarm income	38,600	26,400	31,800	24,900
Net worth	546,100	335,500	419,300	296,800
		Ratio		
Debt/asset ratio	0.17	0.15	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Survey data showed that 53 percent of California farms had a negative net income in 1987. Nearly 75 percent of the farms with negative cash income had a relatively low debt levels. As elsewhere in the region, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for California was 38,600, the highest in the region. Seventeen percent of California farms had high debt levels which was up from the 15 percent a year ago. In addition, the average debt/asset ratio of 0.17 was the highest in the Pacific region. Average net worth was nearly twice the U.S. average in 1987.

The average farm size in California was 240 acres, 42 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned and operated the smallest farms in terms of acreage. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $151,300 and average net cash income was $23,600 in California in 1987. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of California farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	42	5	41	12	100
Economic class:					
$40,000 or more	66	13	13	8	100
Less than $40,000	31	d	54	d	100
Type of farm:					
Vegetable, fruit, nursery	44	5	41	10	100
All crops	47	5	39	9	100
Beef, hog, or sheep	29	d	61	d	100
All livestock or poultry	32	d	46	d	100
			Acres per farm		
Operating:					
Acres owned	150	150	60	50	100
Acres operated	330	440	180	90	240
			Years		
Operator age	53	46	57	45	54
			Dollars per farm		
Financial:					
Crop sales	155,600	389,800	19,500	d	99,900
Livestock sales	65,400	163,600	10,800	8,200	40,300
Other farm income	19,800	28,300	2,600	d	11,100
Gross cash farm income	240,800	581,700	32,900	d	151,300
Cash operating expenses	172,200	448,600	49,700	d	127,700
Net cash farm income	68,600	133,100	-16,800	-35,600	23,600
Nonfarm income	32,400	24,900	44,600	45,100	38,600
Total assets	845,800	1,013,300	496,000	410,300	655,900
Total debt	67,000	668,900	46,200	260,300	109,800
			Ratio		
Ratios:					
Debt/asset	0.08	0.66	0.09	0.63	0.17
Cash expenses/gross income	.72	.77	1.51	1.43	.84
Interest/gross income	.03	.10	.13	.26	.07

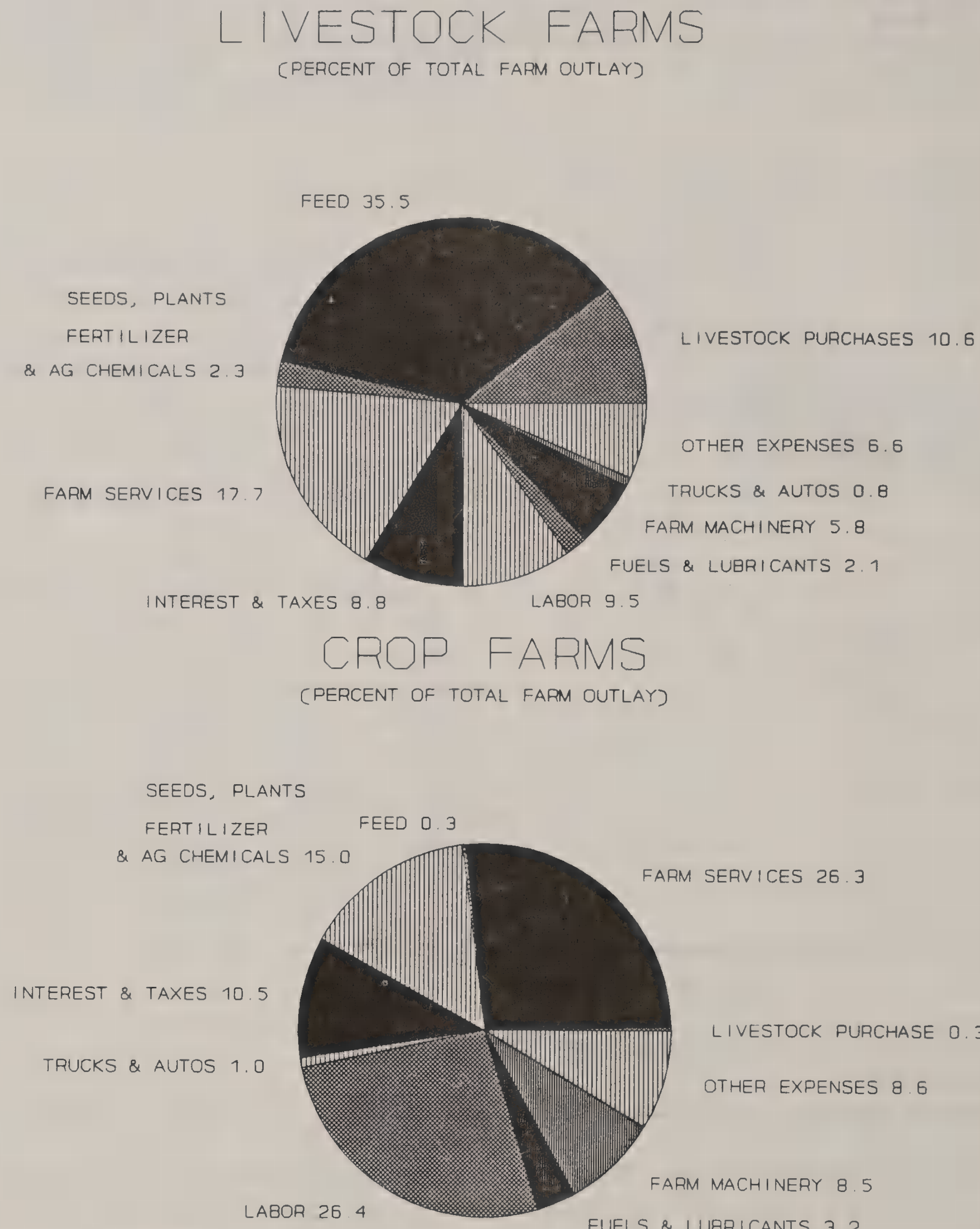
d = Insufficient data for disclosure.

The ratio of expenses to gross income was highest for the negative income, low debt group (1.51), and lowest for the positive income, low debt group (0.72). Farms with negative net cash income had the lowest gross farm incomes and the highest nonfarm income. The ratio of interest expense to gross income ranged from 0.26 for the least favorable group to 0.03 for the most favorable group, implying that some farm operations had to pay over a quarter of their income for interest on borrowed capital.

California farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 66 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes. The farms in this smaller economic class had 54 percent with negative income but low debt.

The financial position of all crop farms was stronger than for farms that specialized in the production of vegetable, fruit, and nursery items. A larger percentage of crop farms had positive incomes and low debt when compared to all livestock farms.

Figure 2--Pacific Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Pacific region totaled $12.8 billion in 1987, up 3.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Pacific region included the following States: CA, OR, and WA. Increased regional expenditures for livestock, farm services, farm supplies, and building and fencing were partially offset by lower feed, interest, taxes, labor, and truck and auto expences. Expenditures for crop farms at $8.6 billion were 67 percent of the total regional expenses. Major expense items on crop farms were labor and farm services (26 percent respectively) and seeds, plants, fertilizer and chemicals (15 percent). Livestock farm expenditures totaled $4.1 billion, 33 percent of the regional expenses. Over one-half of the livestock farm expenses in these States were for feed (36 percent) and farm services (18 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by farm type, Pacific region

Pacific (CA, OR AND WA)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	8,616,500	4,176,799	12,793,299
Livestock and poultry	24,983	453,146	478,129
Feed	21,487	1,481,710	1,503,197
Farm services	2,262,364	740,611	3,002,975
Ag. chemicals and sprays	445,314	36,890	482,204
Fertilizer	545,460	41,461	586,921
Interest	710,937	269,809	980,746
Taxes (property and real estate)	191,333	99,586	290,919
Labor	2,277,422	396,073	2,673,495
Fuels and lubricants	272,999	88,263	361,262
Farm supplies (other)	411,161	69,832	480,993
Building and fencing (other)	59,238	158,946	218,184
Farm and land improvements (other)	81,121	40,328	121,449
Total farm machinery	728,132	241,054	969,186
Seeds	302,574	17,613	320,187
Trucks and autos	85,047	35,214	120,261
Other unallocated expenses	196,928	6,262	203,190

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

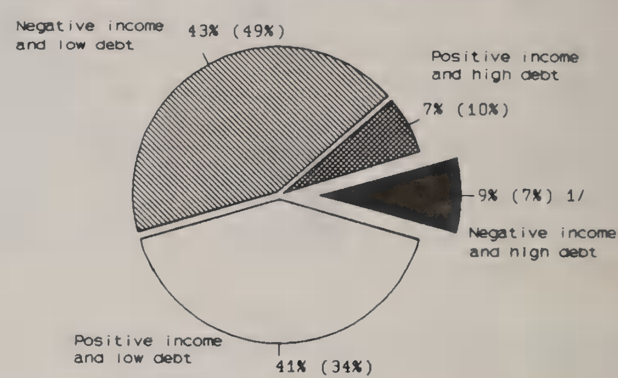
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: WASHINGTON

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF WASHINGTON FARMS SHOWED IMPROVEMENT DURING 1987, according to a survey conducted by the Washington Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Over 40 percent of farms were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 9 percent were classified in the weakest financial position. This was better than the Pacific region average but slightly below the national average. An additional 7 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. For comparison, the survey taken a year ago indicated that only 34 percent of Washington farmers were in the most favorable financial situation, while 7 percent were classified in the weakest position.

Figure 1--Distribution of Washington farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
California	42	5	41	12
WA, OR, CA	39	5	46	10
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	CA	WA	Pacific	U.S.
		Acres per farm		
Acres operated 1/	240	350	330	450
		Dollars per farm		
Crop sales	99,900	47,900	68,200	28,900
+ Livestock sales	40,300	25,900	30,000	29,500
+ Other farm income	11,100	13,400	10,100	11,800
= Gross cash farm income	151,300	87,200	108,300	70,200
- Cash operating expenses	127,700	64,400	88,400	53,300
= Net cash farm income	23,600	22,700	19,900	16,900
Nonfarm income	38,600	26,400	31,800	24,900
Net worth	546,100	335,500	419,300	296,800
		Ratio		
Debt/asset ratio	0.17	0.15	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

In 1987, over half of Washington farms had a negative net cash income, although nearly 80 percent of these farms had a relatively low debt level. As elsewhere in the region, average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for Washington was $1,500 higher than for all U.S. farm households, but was the lowest in the region. Sixteen percent of Washington farms had high debt levels which was down from the 17 percent a year ago. The average debt/asset ratio of 0.15 was the lowest in the region and mirrored the U.S. average.

The average farm size in Washington was 350 acres, 43 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned and operated the smallest farms in terms of acreage. High debt operators, regardless of income position, were generally younger than the operators of other farms. The average gross cash farm income was $87,200 and average net cash income was $22,700 in 1987. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Washington farms by net cash farm income and debt/asset ratio position

Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	41	7	43	9	100
Economic class:					
$40,000 or more	59	21	14	6	100
Less than $40,000	35	1	54	10	100
Type of farm:					
Vegetable, fruit, nursery	33	15	47	5	100
All crops	40	11	40	9	100
Beef, hog, or sheep	53	d	45	d	100
All livestock or poultry	44	2	45	9	100
			Acres per farm		
Operating:					
Acres owned	220	120	90	d	150
Acres operated	540	550	150	260	350
			Years		
Operator age	58	46	59	38	56
			Dollars per farm		
Financial:					
Crop sales	63,900	225,300	10,200	21,600	47,900
Livestock sales	36,500	68,900	11,900	d	25,900
Other farm income	23,200	34,300	2,000	6,400	13,400
Gross cash farm income	123,700	328,500	24,100	39,500	87,200
Cash operating expenses	74,200	196,100	35,700	59,100	64,400
Net cash farm income	49,500	132,300	-11,600	-19,500	22,700
Nonfarm income	16,800	17,100	36,300	30,400	26,400
Total assets	441,000	402,200	384,000	199,600	392,800
Total debt	40,300	255,600	27,600	133,400	57,300
			Ratio		
Ratios:					
Debt/asset	0.09	0.64	0.07	0.67	0.15
Cash expenses/gross income	.60	.60	1.48	1.49	.74
Interest/gross income	.04	.08	.13	.27	.07

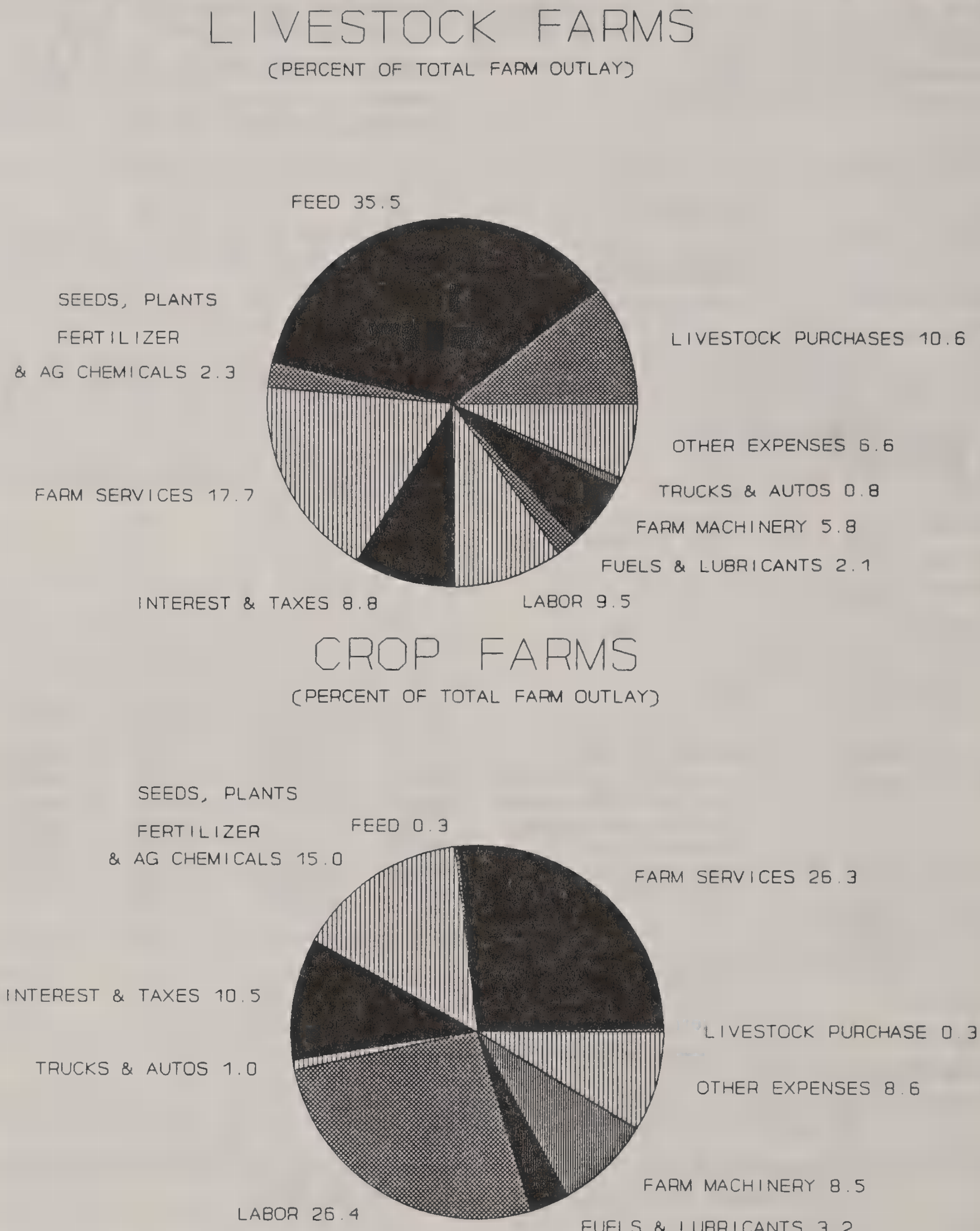
d = Insufficient data for disclosure.

The ratio of expenses to gross income was highest for the negative income, high debt group (1.49) and lowest for both groups of farms with positive incomes (0.60). Farms in the most favorable financial position had the lowest nonfarm income. The ratio of interest expense to gross income ranged from 0.27 for the negative income, high debt farms to 0.04 for operations classified in the most favorable group.

Washington farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 59 percent, than farms in the smaller economic class, 35 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

A lower percentage of farms that specialized in the production of vegetable, fruit, or nursery items were in the strongest financial position when compared with crop farms in general. Nine percent of both crop and livestock farms had negative incomes and high debt, while a larger proportion of livestock farms had positive incomes and low debt. In 1987, beef, hog, and sheep farms had were in a relatively stronger financial position than all livestock producers.

Figure 2--Pacific Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Pacific region totaled $12.8 billion in 1987, up 3.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Pacific region included the following States: CA, OR, and WA. Increased regional expenditures for livestock, farm services, farm supplies, and building and fencing were partially offset by lower feed, interest, taxes, labor, and truck and auto expences. Expenditures for crop farms at $8.6 billion were 67 percent of the total regional expenses. Major expense items on crop farms were labor and farm services (26 percent respectively) and seeds, plants, fertilizer and chemicals (15 percent). Livestock farm expenditures totaled $4.1 billion, 33 percent of the regional expenses. Over one-half of the livestock farm expenses in these States were for feed (36 percent) and farm services (18 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

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Pacific (CA, OR AND WA)	Crop farms	Livestock farms	Region total
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Total farm production expenditures	8,616,500	4,176,799	12,793,299
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Feed	21,487	1,481,710	1,503,197
Farm services	2,262,364	740,611	3,002,975
Ag. chemicals and sprays	445,314	36,890	482,204
Fertilizer	545,460	41,461	586,921
Interest	710,937	269,809	980,746
Taxes (property and real estate)	191,333	99,586	290,919
Labor	2,277,422	396,073	2,673,495
Fuels and lubricants	272,999	88,263	361,262
Farm supplies (other)	411,161	69,832	480,993
Building and fencing (other)	59,238	158,946	218,184
Farm and land improvements (other)	81,121	40,328	121,449
Total farm machinery	728,132	241,054	969,186
Seeds	302,574	17,613	320,187
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Other unallocated expenses	196,928	6,262	203,190

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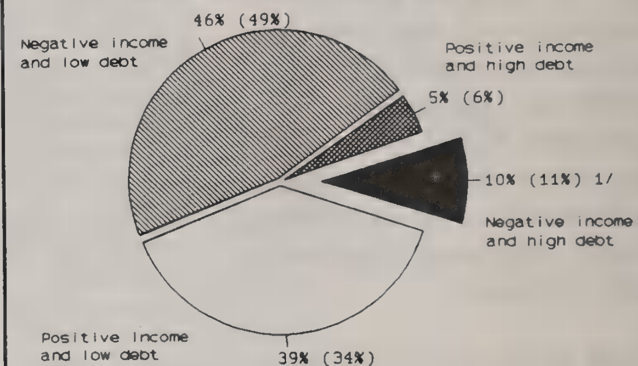
FARM COSTS AND RETURNS SURVEY 1987 SUMMARY: WASHINGTON, OREGON, CALIFORNIA

U. S. Department of Agriculture
National Agricultural Statistics Service
Economic Research Service
Washington, D.C. 20250

THE OVERALL FINANCIAL POSITION OF THE PACIFIC REGION (WASHINGTON, OREGON, AND CALIFORNIA) FARMS INDICATES MORE STRESS THAN IN NEIGHBORING REGIONS DURING 1987, according to a survey conducted by the each State's Agricultural Statistics Service. The Farm Costs and Returns Survey was part of a national survey which collected data during February and March 1988. This report assesses a farm's financial condition by jointly considering the net cash income position of a farm (positive or negative) and the amount of debt relative to assets (above or below 0.40).

Thirty-nine percent of farms in the Pacific region were in the most favorable financial situation, having positive net cash farm incomes and low relative debt levels. At the other extreme, 10 percent were classified in the weakest financial position. An additional 5 percent of farms had high debt and positive net incomes. The financial position of these farms could deteriorate if expenses should increase or if incomes are adversely affected by drought. A year ago, only 34 percent of the Pacific region farmers were in the most favorable financial situation, while 11 percent were classified in the weakest position.

Figure 1--Distribution of Washington, Oregon, and California farms by net cash farm income and debt/asset ratio position



Results for other States or regions

	Positive income		Negative income	
	Low debt 2/	High debt 3/	Low debt	High debt
	Percent of farms			
California	42	5	41	12
Washington	41	7	43	9
U.S.	49	8	36	7

1/ Values in parentheses represent 1986 FCRS results.
2/ Low debt defined as a debt/asset ratio of 0.40 or less.
3/ High debt defined as a debt/asset ratio above 0.40.

Table 1--Selected average operating and financial characteristics

Item	CA	WA	Pacific	U.S.
		Acres per farm		
Acres operated 1/	240	350	330	450
		Dollars per farm		
Crop sales	99,900	47,900	68,200	28,900
+ Livestock sales	40,300	25,900	30,000	29,500
+ Other farm income	11,100	13,400	10,100	11,800
= Gross cash farm income	151,300	87,200	108,300	70,200
- Cash operating expenses	127,700	64,400	88,400	53,300
= Net cash farm income	23,600	22,700	19,900	16,900
Nonfarm income	38,600	26,400	31,800	24,900
Net worth	546,100	335,500	419,300	296,800
		Ratio		
Debt/asset ratio	0.17	0.15	0.16	0.15

1/ Defined as acres owned plus acres rented (excluding AUM land) minus land rented to others.

Survey data showed that 56 percent of the Pacific region farms had a negative net cash farm income, down from 60 percent a year earlier. Nearly 80 percent of the farms with negative cash income in 1987 had a relatively low debt level. Average nonfarm income was greater than average net cash earnings from farming. Average nonfarm income for the Pacific region was $31,800, which was 1.6 times the amount of net cash farm income. Fifteen percent of the Pacific region farms had high debt levels; ten percent included negative income. The average debt/asset ratio of 0.16 was slightly higher than the U.S. average of 0.15.

The average farm size in the Pacific region was 330 acres, 45 percent of which were owned by the operator. On average, farms with positive net incomes owned and operated more acreage than did farms with negative incomes. Farms in the least favorable financial position owned over 75 percent of the total acres operated. High debt operators, regardless of income position, were generally younger than the operators of low debt farms. The average gross cash farm income was $108,300 and average net cash income was $19,900 in the Pacific region in 1987. Not surprisingly, farms with positive net incomes had the largest average gross and net incomes.

Table 2--Average operating and financial characteristics of Washington, Oregon, and California farms by net cash farm income and debt/asset ratio position

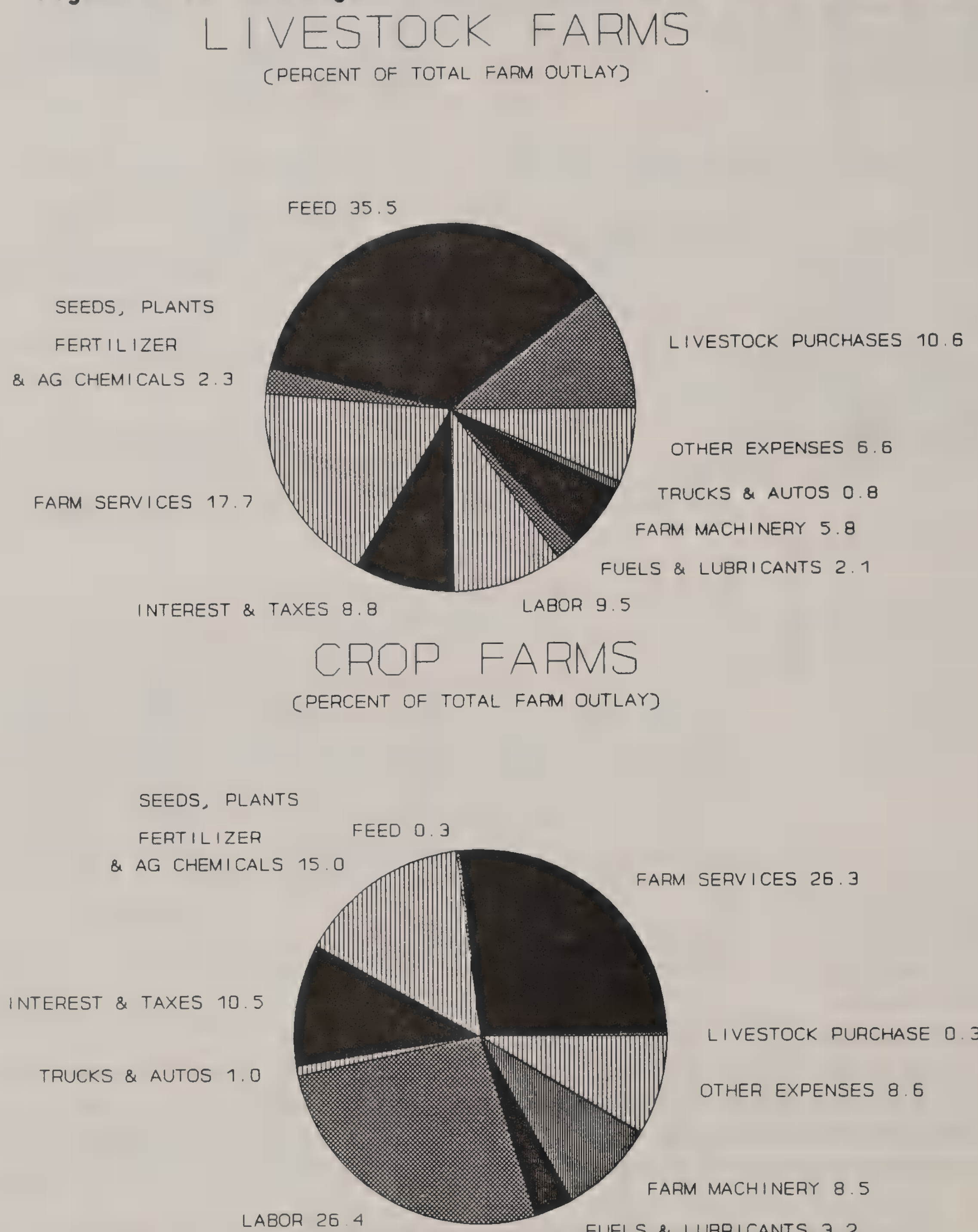
Item	Positive income and low debt	Positive income and high debt	Negative income and low debt	Negative income and high debt	All farms
			Percent		
All farms	39	5	46	10	100
Economic class:					
$40,000 or more	64	16	13	7	100
Less than $40,000	29	1	58	12	100
Type of farm:					
Vegetable, fruit, nursery	42	7	43	8	100
All crops	45	7	39	9	100
Beef, hog, or sheep	30	3	61	6	100
All livestock or poultry	31	3	54	12	100
			Acres per farm		
Operating:					
Acres owned	210	300	80	120	150
Acres operated	450	790	200	160	330
			Years		
Operator age	55	45	58	43	55
			Dollars per farm		
Financial:					
Crop sales	114,100	264,600	11,800	48,500	68,200
Livestock sales	48,000	103,300	10,900	11,000	30,000
Other farm income	18,500	32,100	1,900	4,300	10,100
Gross cash farm income	180,500	400,000	24,600	63,800	108,300
Cash operating expenses	122,600	283,600	36,800	91,800	88,400
Net cash farm income	57,900	116,400	-12,100	-28,000	19,900
Nonfarm income	25,100	20,800	36,900	39,600	31,800
Total assets	638,300	654,700	401,400	338,400	499,200
Total debt	52,600	418,500	33,500	215,100	79,900
			Ratio		
Ratios:					
Debt/asset	0.08	0.64	0.08	0.64	0.16
Cash expenses/gross income	.68	.71	1.49	1.44	.82
Interest/gross income	.03	.09	.13	.27	.07

The ratio of expenses to gross income was highest for the negative income, low debt group (1.49) and lowest for the positive income, low debt group (0.68). Farms in the least favorable financial position had the highest nonfarm income. Those with high debt levels had higher gross incomes than farms with low debt levels. The ratio of interest expense to gross income ranged from 0.27 for the high debt, negative income farms to 0.03 for farms classified in the most favorable group.

Pacific region farms in the largest economic class ($40,000 and above in gross cash income from farming) were more likely to be in a favorable financial position, 64 percent, than farms in the smaller economic class, 29 percent. Farms in the smallest economic class were less likely to have high debt positions, but were much more likely to have negative farm incomes.

Overall, crop farms were in a better financial position than were livestock farms. Farms that specialized in the production of vegetable, fruit, and nursery items farms had a similar financial performance with all crop farms. Operations that specialized in the production of beef, hogs, or sheep had a lower percentage of farms in the weakest financial position when compared with all livestock farms.

Figure 2--Pacific Region Farm Production Expenditures by Farm Type



Farm production expenditures in the Pacific region totaled $12.8 billion in 1987, up 3.1 percent from 1986, according to the National Agricultural Statistics Service (NASS), USDA. In comparison, United States production expenditures were $110.1 billion, an increase of 3.9 percent from a year earlier. The Pacific region included the following States: CA, OR, and WA. Increased regional expenditures for livestock, farm services, farm supplies, and building and fencing were partially offset by lower feed, interest, taxes, labor, and truck and auto expences. Expenditures for crop farms at $8.6 billion were 67 percent of the total regional expenses. Major expense items on crop farms were labor and farm services (26 percent respectively) and seeds, plants, fertilizer and chemicals (15 percent). Livestock farm expenditures totaled $4.1 billion, 33 percent of the regional expenses. Over one-half of the livestock farm expenses in these States were for feed (36 percent) and farm services (18 percent).

Expenditure data in 1987 are not directly comparable with previous data because of a change in the target population. The 1987 FCRS target population is defined as "any establishment from which $1,000 or more of agricultural products were sold or would normally be sold during the year." In previous surveys the population included "any farm that sold or spent at least $1,000 for agricultural production." The change in population definition ensures comparability with other NASS survey data used to estimate farm numbers.

Table 3--Selected production expenditures by farm type, Pacific region

Pacific (CA, OR AND WA)	Crop farms	Livestock farms	Region total
		1,000 Dollars	
Total farm production expenditures	8,616,500	4,176,799	12,793,299
Livestock and poultry	24,983	453,146	478,129
Feed	21,487	1,481,710	1,503,197
Farm services	2,262,364	740,611	3,002,975
Ag. chemicals and sprays	445,314	36,890	482,204
Fertilizer	545,460	41,461	586,921
Interest	710,937	269,809	980,746
Taxes (property and real estate)	191,333	99,586	290,919
Labor	2,277,422	396,073	2,673,495
Fuels and lubricants	272,999	88,263	361,262
Farm supplies (other)	411,161	69,832	480,993
Building and fencing (other)	59,238	158,946	218,184
Farm and land improvements (other)	81,121	40,328	121,449
Total farm machinery	728,132	241,054	969,186
Seeds	302,574	17,613	320,187
Trucks and autos	85,047	35,214	120,261
Other unallocated expenses	196,928	6,262	203,190

NASS production expenditure data in table 3 differ from the Economic Research Service (ERS) total cash operating expense estimates in tables 1 and 2 because the ERS estimates consider only cash expenses necessary for the annual operation of the farm business. In general, total farm production expenditures exceed cash operating expenses by the amount of landlord expenses and capital purchases.

NASS and ERS collaborated to produce this special report using data collected in the 1987 Farm Costs and Returns Survey. The survey data are the results of contacting over 24,000 farmers and ranchers. Individuals surveyed were chosen from a list of farm operators supplemented with producers living inside randomly selected geographical areas to ensure representation of all farms which sell or normally sell at least $1,000 of agricultural products.

REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE DIRECTED TO THE STATE STATISTICIAN IN THE LOCAL AGRICULTURAL STATISTICAL SERVICE OFFICE. OTHER PUBLICATIONS ON FARM ECONOMIC DATA WILL BE AVAILABLE LATER THIS YEAR.

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